

The AFRICAN FOREST FORUM

 a platform for stakeholders in African Forestry Final report on the planning phase of the project

"African-Swedish collaboration programme on Sustainable Forest Management"

Dr. Bjorn Lundgren Prof. Fredrick Owino Prof. Romanus Ishengoma Mr. Peter Gondo (2011-04-07)

Contents of report

Foreword 5		
1.	Introduction	6
1.1	 The emerging roles of forests and trees in Africa Poverty reduction and income generation Food security Environmental roles and opportunities Possible roles for Swedish and other development partners? 	6 6 9 10
1.2	The AFF-KSLA project – goals and work done in the planning phase	11
1.3	How do we proceed from here – vision and work remaining	13
1.4	Overview of the characteristics and use of forests in the region <i>Extent, composition and distribution</i> <i>Economic importance</i> <i>Forest ownership</i>	14 14 14 15
2.	Forest policies and legislation/institutions to implement them	16
2.1	Origin, development and current status of forest policies and legislation in E/S Africa	16
2.1.1 2.1.2 2.1.3 2.1.4 2.1.5	Historical background Evolving issues and opportunities at regional and trans-boundary levels Rationale and justification for policy, legislation and institutional reviews Driving forces in policy, legislation and institutional reforms Impact of changing economic, environmental and social importance and values of forests	16 17 19 20
2.1.6 2.1.7 2.1.8	Processes and mechanisms of developing and administering forest policies, and legislation and institutions to implement such policies National highlights Regional highlights	25 25 27 30
2.2	Swedish forest policy and legislation	30
2.3	Suggested areas for cooperation	32
3.	Strengthening Africa's technical and institutional capacity to support SFM	34
3.1	Current status of mechanisms, facilities and institutions supporting SFM in E/S Africa	34
3.1.1	Research on forest and tree resources – institutions, resources, relevance	34
3.1.1.1 3.1.1.2	Forest Research Institutes Forest Research Programmes	34 36
3.1.2	Education and training institutions and programmes – quality and numbers of forest personnel	37

3.1.2.1 3.1.2.2	Universities providing forestry education Forest colleges	37 39
3.1.3	Extension services and provision of information to tree growers, forest communities, small-scale wood and NWFP based industries, etc.	40
3.1.4	Inventories of forest and tree resources, monitoring and quantifying trends	43
3.1.4.1	National Forestry Resources Monitoring and Assessment of	
3.1.4.2	Tanzania (NAFORMA) Integrated assessment of Mozambican forests	43 45
3.1.5	Market information on wood and NWFP based products – consumption patterns and trends, internal trade, import/export, etc.	46
3.1.6	Mechanisms to safeguard phyto-sanitary and germplasm quality conditions, prevention of invasive species	48
3.2	Swedish institutions and mechanisms	49
3.3	Suggested areas for cooperation	50
4.	Organising and empowering stakeholders in the manage- ment and use of forest and tree resources	53
4.1	Current situation with regard to organisation and strength of relevant forest and tree stakeholder groups in E/S Africa	53
4.1.1	Eastern Africa: Community Stakeholder Organisations	53
4.1.1.1 4.1.1.2 4.1.1.3	Forest User Groups Community or Collaborative Forest Associations National networks/federations of community forestry associations	55 55 56
4.1.2	Southern Africa: Community Stakeholder Organisations	57
4.1.3	Private/Commercial timber producers	59
4.1.3.1 4.1.3.2 4.1.3.3 4.1.3.4 4.1.3.5	Introduction Commercial stakeholder organisation Timber growers/producers' associations Charcoal producers' associations Furniture manufacturers association	59 59 60 61 61
4.1.4	Multi-stakeholder organisations	61
4.1.4.1 4.1.4.2 4.1.4.3 4.1.4.4	National Forest Working Groups Multi-stakeholder steering committees (MSSC) Professional Forestry Societies/Associations Special institutions	62 62 63 63
4.1.5	Regional organisations and initiatives	64
4.1.5.1 4.1.5.2 4.1.5.3	The Southern Africa Development Community (SADC) The Common Market for Eastern and Southern Africa (COMESA) The East African Community (EAC)	64 65 66
4.2	Swedish institutions and mechanisms	67
4.3	Suggested areas for cooperation	68

Appendices

Appendix 1	People and institutions consulted	71
Appendix 2	Programmes and participants in workshops in Nairobi and Lusaka	77
Appendix 3	Project proposal concept notes	91
Appendix 4	Reference	146

Foreword

This report contains the outcomes of the planning phase of a joint project between the African Forest Forum and the Royal Swedish Academy of Agriculture and Forestry. The project started in early 2009 as one of seven activities under Sida's three-year grant to AFF's initial operations. The project is described more in detail in *section 1.2*.

The **African Forest Forum** (AFF; www.afforum.org) was established in 2007 as an outcome of the Sida-supported project "Sustainable Forest Management in Africa" (**SFM in Africa**, 2002-2008). It is an association of individuals with a commitment to, and interest in, the sustainable management, use and conservation of Africa's forest and tree resources. Today (early 2011), there are c. 600 members from all over the continent and beyond. One of the main purposes of the Forum is to provide independent and objective analysis, advice and advocacy to national, regional and international institutions and actors on how forest and tree resources can contribute to the reduction of poverty, promotion of economic and social development, and enhancing the environ-mental stability of the continent.

The **Royal Swedish Academy of Agriculture and Forestry** (KSLA; www.ksla.se) is a meeting place for the green sector in Sweden since its foundation in 1811. It is a free and independent network organisation working with issues relating to agriculture, horticulture, food, forestry and forest products, fishing, hunting and aquaculture, the environment and natural resources, and with agricultural and forest history. KSLA is an impartial organisation, economically independent of the authorities, business and interest groups. Its free and independent position in society and its good name create unique opportunities for meetings and constructive discussions. Membership is individual and members (Swedish, Honorary and Foreign) are elected by the Academy. The Academy conducts much of its work through committees and working groups. One is the *Committee on International Forest Issues*, through which KSLA collaborates with AFF.

Together with the *African Forest Research Network* at the *African Academy of Sciences* (AFORNET/AAS) and *FAO*, KSLA played an important role in the conception and implementation of the two phases of the "SFM in Africa" project, which, among many other things, resulted in the initiation and early operation of the AFF. The KSLA office in Stockholm carried out extensive administrative and financial management support activities in connection with the grants from Sida for the implementation of the two project phases. There was also a strong professional input into the SFM project from KSLA, which has continued since the establishment of AFF.

As a result of the positive experience derived from this mutually beneficial collaboration, it was a strong desire by AFF and KSLA, when the former acquired its legal status in late 2007 and early 2008, and when it became fully operational in its own right on 1st November 2008, that the collaboration should continue. This is now regulated in a Memorandum of Understanding. One of the aspects of this MoU is the current "*African-Swedish collaboration programme on Sustainable Forest Management*", of which the planning or inception phase has been carried out during 2009-2010.

The present preliminary report is based on a wide-ranging set of consultations with potentially interested stakeholders in Eastern and Southern Africa and in Sweden by the undersigned team of experts. We would like to take this opportunity to thank all those who have contributed, and continue to contribute, ideas and views on how African, Swedish and other partners can work together to achieve sustainable management, use and conservation of Africa's forest and tree resources. We particularly thank those who very actively participated in the two workshops organised in Nairobi and Lusaka in April 2010 to discuss the preliminary findings and ideas coming out of the work.

Harare 09/04/11

Mr. Peter Gondo

Morogoro 09/04/11

oma

Prof. Romanus Ishengoma

Stockholm 09/04/11

Nairobi 09/04/11

Dr. Bjorn Lundgren

Prof. Fred Owino



Photo: the project team – Dr. Bjorn Lundgren, Prof. Fred Owino, Prof. Romanus Ishengoma and Mr. Peter Gondo, together with the Executive Secretary of the African Forest Forum, Prof. Godwin Kowero, and the Managing Director and Permanent Secretary of the Royal Swedish Academy of Agriculture and Forestry, Mr. Ake Barklund. From left: BL, GK, FO, AB, RI and PG.

1. Introduction

1.1 The emerging roles of forests and trees in Africa

There is a tendency today in international discourses to mainly regard forests as an environmental issue – problems such as loss of biodiversity, increased CO2 emissions, negative impacts on climate and hydrology, etc., are partly caused by deforestation and degradation. By implication, reduced deforestation and degradation, reforestation, and conservation of forests can fix these problems. Naturally, these simplified relations hold more than a grain of truth, they are basically correct in theory. However, a singular focus on them tends to ignore the enormous economic and social potentials that lie in the development of sustainable forest and tree management. Likewise, they overlook the historical evidence that it is only in countries and economies where forests have acquired an economic value that they cease being regarded as a land reserve that can be cleared for more important uses (food or cash crops mainly). The often under-estimated economic potentials, in combination with the fact that the peoples and governments of African are acutely aware of the importance of achieving solid economic and social development **before** being able to effectively address environmental problems, makes us start with comments on the potential role of forests and trees on income generation and food security, before we turn to the environmental aspects.

Poverty reduction and income generation

Reducing poverty by increasing poor peoples' income, and achieving economic development in general, are obvious goals in national (Poverty Reduction Strategies – PRSPs) and regional (the New Economic Partnership for Africa's Development - NEPAD) policies or for international targets (the Millennium Development Goals - MDGs). Unfortunately, at all these goal levels, neither the

real current value nor the potential importance of forests and trees and the vast array of goods and utilities derived from them (wood/fibre, energy, food, fodder, medicines, etc.) are fully appreciated. This is mainly because most of these goods and utilities, and the trade and sales of them, are not captured in national or international statistics. Sometimes this is because production, trade and/or consumption of them are officially illegal, sometimes because the whole value chain for products falls outside the measured and taxed market. This applies to locally collected, produced and sold furniture and building material, NWFPs, "bush meat" and, not least, fire wood and charcoal. What is captured in official statistics is what is produced through larger secondary and tertiary industry and through legal trade, export and import, which, with the possible exceptions of the forest-rich countries of the Congo Basin and the plantation based forest industry of South Africa, is quite modest.

As illustrations we can look at two examples from the charcoal markets in East Africa. In the capital of Rwanda, Kigali, with its c 800 000 inhabitants and where almost all households use charcoal for cooking and heating, it was estimated in 2007 that the annual sale of charcoal was valued at USD 25-30 million. This is close to the country's biggest export income earner, coffee, which annually brings in USD 35 million. About half of the sales value in Kigali of charcoal goes to the rural producers, half to the transport and trade entrepreneurs involved. In all, it is likely that tens of thousands of people earn their livelihood from charcoal production and trade. Nothing of this shows up in official statistics and, obviously, there is no tax income for the state from this trade.

Even more staggering figures were revealed in a report from Kenya in 2008 from the project "Miti Mingi Maisha Bora – Support to Forest Sector Reform in Kenya" where it was claimed that:

"The charcoal industry represents an estimated annual market value of Kshs 32 billion (USD 425 million) that is not visible to the government because of its informal nature. The government loses over Kshs 5.1 billion (USD 68 million) annually as a result of not having any regulatory and VAT tax collection mechanisms for the charcoal industry". What is equally interesting is the social and livelihood aspects of this production and trade: "The charcoal industry employs over 700,000 people who support over 2 million dependants. Where wood supply is not a constraint, fulltime charcoal producers can earn between Kshs 20,000 and 30,000 per month making it a well-paying proposition."

Actually, this is well above the national average family income and it is important to realise that 75% of the charcoal come from dry areas of the country, normally seen as the most poverty stricken regions in the country. Studies in Tanzania indicate a similar magnitude in charcoal trade and in its income earning potential.

There are similar *ad hoc* studies and estimates from all over Africa for other wood and non-wood forest derived products and their more or less obscure market and value chains from production to consumption. Although virtually all studies point at the growing economic importance of such products, and their significant roles in rural livelihoods, the overall view is normally that they represent a major **problem** in that the raw material is often derived from unsustainably managed resources. In other words, the production, trade and consumption of all these highly important consumer goods, and they are certainly not "unnecessary luxury consumer goods", result in deforestation.

This is obviously true, but equally true, and considerably much more constructive and challenging, is to look upon the growing production and trade of wood and non-wood forest/tree derived items as an **enormous potential** for poverty reduction and economic growth. Because the needs and demand for these products will not go away, they will instead grow very rapidly. Africa's population is increasing, urbanisation is growing even faster, and the recent upturn of many African economies, all contribute to rapidly growing domestic and intra-regional markets for these products. In addition, there are growing export markets, e.g. in East Africa of charcoal to the Gulf States.

To achieve sustainable management of forest and tree resources that permits a dynamic growth of production and trade of wood and non-wood based products, in ways that significantly contribute to poverty reduction and economic growth, is an enormous challenge. But, at least in broad terms, we know quite well what needs to be done and, equally important, we know where we need to know more. Technologies for production of various items must be developed (or improved) and adapted to farmers', communities' and forest living peoples' needs and abilities; training and extension programmes must be drastically increased; research must be applied to solve biological, economic and social bottlenecks to achieving SFM; policies, laws and regulations must be adapted

and enforced in ways that support people's efforts to gain from SFM and prevent illegal activities; stakeholders must be encouraged and supported to organise themselves in all parts of the value/ market chain; domestic, intra-African and international trade in forest products must be regulated and stimulated; national and regional resource inventories, monitoring and analyses will be required; etc.

This is a tall order which will require vision, leadership, resources, knowledge and experience. It will also need collaboration between Africa and development partners from around the world.

Food security

With the sharp increases in food prices in 2008, and again in 2010/11, and the many and increasingly frequent droughts, fires and floods in Africa, the issue of food security has regained its rightful place among key international priorities. At first sight, the relations between the forest/tree sector and food security may not be apparent. However, there are at least four very direct, crucially important, and partly interrelated connections.

First, there is the obvious relation between reduced poverty through supplementary income from trees and wood products and thereby an increased ability of people involved with such production and trade to buy their food needs, rather than producing it themselves. The economic potential of forests and trees can, and does already, significantly contribute to food security among rural and urban poor.

Second, there is the ability of many trees in various agroforestry management systems to both increase productivity of food and other agricultural crops and livestock, as well as enhancing the sustainability and stability of such systems. Research by ICRAF in collaboration with numerous African agriculture and forestry research institutions have provided ample evidence of the important role of trees in food production (e.g. fruit trees), through soil fertility improvement, creation of amenable micro-climate conditions for crop growth, and provision of fodder for livestock. Much research, development and scaling up efforts remain to be done to fully develop this potential, work that is eminently suitable to be addressed through regional net-working efforts.

Third, there are the macro-influences on the agricultural production systems associated with adjacent or up-stream forests, or the destructive removal or absence of them. The presence of forests, wood groves and trees are essential to the stability in water supply for irrigation, enhancement of meso-climate (temperatures and winds), and supply of supplementary inputs in the form of fodder, grazing, energy, and edible plants. Conversely, destruction of crucial watershed forests will cause erosion, irregular water flow in rivers and streams, and more destructive fluctuations in local climate. Although these relations are well known since very long, they tend to be overlooked in short-sighted decisions both by land users themselves and, often even more damaging, by politicians for whom excision of forest lands for other uses is tempting for a variety of reasons. In recent years, the emergence of so called "landscape approaches" to rural development recognises the need to look upon the larger picture and the close relations and inter-actions between crop production, livestock rearing, forests and forestry, and other large-scale interactions influencing the sustainable access to natural resources (soil, water and biodiversity).

Fourth, the growing competition for good land between food crops, commercial bio-energy production and forests/forestry (the so called "three F issue - food, fuel, fibre") is a rather recently highlighted development. The International Institute of Applied Systems Analysis (IIASA) has made some very thought-provoking studies and models which clearly indicate that the issue deserves urgent attention by politicians, international and regional/national bodies in many parts of the world. In Africa, the "scramble for land" has already started and is projected to be particularly intensive in view of the large areas of land with relatively sparse populations - the rain forests of the Congo Basin and the vast Miombo woodlands of southern Africa. Investors from all over the world are looking for opportunities to grow food for export to their home countries, energy plants (soy beans, grains, oil palms, sugar cane, trees, etc.) for biofuel use, or tree plantations for timber and pulp production. The International Food Policy Research Institute (IFPRI) has, for example, calculated that between 2006 and late 2009, 15-20 million hectares of land in "poor countries" have been sold or are under negotiation for sale to foreign buyers - much in Africa. Naturally, this is an issue that not only affects the interrelations between forests and food security, but has much wider environmental, social and economic implications. In developing policies, strategies and plans for how to turn this interest in land into opportunities for economic growth and at the same time ensuring environmentally and socially responsible transfer and use of land resources, the role of forests and trees in economic development and for food security (as per above) as well as their

environmental roles (see below) must be factored in. Otherwise, we run a risk that forests and woodlands will simply continue to be regarded as a land reserve without economic value *per se*, more than as biodiversity depositories or stored CO2.

In summary, forests and trees interact with food security issues at many scales and in many essential ways. To ignore or underestimate them could lead to unnecessary negative impacts on food security, whereas a systematic enhancement of the positive interactions could be a powerful tool in improving the food security of rural and urban poor in Africa. Many of the actions needed – in the form of research, creating transboundary mechanisms for regulating agricultural water use, developing regional land strategies, inventory resources, mapping and monitoring landscape dynamics, etc. – are well suited to regional approaches.

Environmental roles and opportunities

Finally, the environmental roles, problems and opportunities associated with forests are enormous and the reasons why we take them up last is only that they already attract very significant attention in virtually all international, regional and national fora, and, as stated above, that they tend to obscure the many economic and social roles of SFM.

Today, this obviously applies to the *climate change issue* and the actual and potential roles that forests and trees will/can play in both mitigation and adaptation efforts. AFF is heavily involved with the issue. A special AFF Governing Council "Working Group on Climate Change" was established and in September 2008 this Working Group organised a workshop on forest-climate issues. As an outcome of this workshop, an "Expert Group on Climate Change" with seven prominent African experts was set up, and an African position paper on climate-forest issues was developed. Through these groups, AFF attended the UNFCCC meeting in Poznan and many sub-regional meetings related to climate change in Africa, and several consultancies on specific aspects of climate change-forests have been commissioned. The AFF experts attended the big AMCEN meeting in late May 2009 in preparation for COP15, and also COP15 itself in Copenhagen in December 2009. AFF also had representation at the recent COP 16 in Cancun, Mexico. Together with FAO's Regional Office for Africa, AFF has organised two subregional workshops on the climate-forest issues, one in Nairobi in November 2009 and one in Brazzaville in February 2010, and plans to organise one in Southern Africa in early 2011

In short, there are few, if any, issues that have attracted as much effort by AFF in its short existence as the interactions between climate change and forests. In view of the importance of the issues, and the huge economic potentials and risks, as well as impacts on the continents' forest resources, associated with the many instruments put in place by the international community today (for example, REDD, CDM, the WB's Carbon Finance Unit, and various other Carbon Funds) it will remain a top priority for the foreseeable future. In the AFF position paper mentioned above, it is stated:

"The forests and trees are impacted by climate change and also influence climate. The African forestry perspectives are not sufficiently included in global climate change debates. The risk is the development of inadequate, or even inappropriate, strategies for mitigation and adaptation to climate change using forests and trees.

The existing Clean Development Mechanism (CDM) and its post 2012 version, together with the proposed Reduction of Emissions from Deforestation and Degradation (REDD) mechanism to address climate change fare differently under the diverse African conditions, given the critical role of forests and trees in the African socio-economic fabric.

Unless conditionalities, definitions, procedures and other limiting requirements involved in negotiations are favourably modified, it will remain difficult for African countries to effectively participate in the global efforts to address climate change, including attracting resources for CDM, its post 2012 replacement, and REDD mechanisms.

More significantly, the current and proposed mechanisms do not appear to address sufficiently the drivers of deforestation and degradation on the continent. Without significant improvements in crop and livestock agriculture, domestic and industrial energy efficiency, wood and non-wood harvesting and processing, and diversification of livelihood options for the poor, measures to reduce deforestation and degradation through these mechanisms hold very limited potential for impact climate change mitigation and adaptation in Africa. For REDD or any other mechanism to

be effective in Africa it should take into account activities in the full range of Agriculture, Forestry, and Other Land Uses (AFOLU)".

One environmental aspect of forests in Africa that remains important but which seems to have lost some of the prominence given to it only three to five years ago (no doubt related to the emerging focus on climate change issues), is the role of forests and other tree-dominated ecosystems in **biodiversity conservation**. Biodiversity, in the sense of the variation and variety of species and races of plants and animals, and the genetic variation within them, have been in the focus of international attention and programmes since the Convention of Biological Diversity (CBD) was put in place following the 1992 meeting in Rio de Janeiro. The biodiversity value of Africa's rainforests, woodlands and wooded savannas has been ascertained through numerous studies, and so has the documentation of the rapid destruction of these values through deforestation and degradation. In spite of local success stories of conserving and protecting, or sustainably utilising such biodiversity through ecotourism (in national parks or reserves), efforts championed by local national authorities and NGOs, private enterprises and international organisations, the picture remains bleak. Where population pressure is building up and where armed conflicts are reaching into forested and wooded areas, no matter earlier intentions of protecting forests efforts to protect biodiversity are failing.

Whereas there are undeniably "biodiversity hotspots" where complete protection and conservation is the only feasible guarantee to protect valuable plant and animal species, the way forward in biodiversity conservation must lie in multiple land use, recognition of the economic values in wild biodiversity (food, medicines, gums and resins, chemicals, etc.) and the legitimate interest in exploiting some of this, the participation of local communities in the use and protection of the resources, and in approaches that look upon the larger scale landscape picture. AFF, with a signifycant membership also from the African regional and national environmental NGO community and civil servants and researchers in national environmental bodies, will play an active role in promoting the biodiversity values and protection of forests in Africa. Again, much of the actions and approaches required in this work will be regional in nature.

Finally, an old and well known environmental relation is coming into prominence again, viz. the *impact of forest vegetation on the hydrology of river and lake basins*. Already a hundred years ago, when colonial powers started to create forest reserves in African countries, the explicit justification was to protect water sources (and, of course, also to safeguard the supply of timber). Rapid population increase and resulting deforestation caused by the need for new agricultural land - a process that has been continuous and accelerating for at least 50-75 years - in combination with the apparent increase in more recent decades of severe droughts, floods and fires, and the resulting food shortages and human sufferings that these are causing, have put a new focus on the issue of water availability. Many experts predict water shortages to be the worst environmental, social and political problem in parts of Africa in the immediate future.

It is quite logical that some of the biggest cross-boundary and interregional development efforts in Africa in recent decades are focussing on "hydrological land units", e.g. the various River Basin programmes or authorities (the Zambezi and Nile river basins), or the great lakes (e.g. the Lake Victoria Basin Commission). All big rivers in Africa, without exception, have their origin in forested areas, either the rain forest, the miombo or savanna woodlands, or the "montane forest water towers" of East Africa. The decline in the macro-hydrological conditions is not only a serious threat to agriculture (see above), it will affect all aspects of societal development and cause serious conflicts between people and nations. To address this emerging threat, determined efforts on a large scale must be made, including establishing the role(s) of the type, extent and management of forests in watershed stabilisation, and to work at all levels to achieve such forest-based watershed improvements. The obvious regional nature of these problems, and of approaches to their solutions, makes AFF having a role in providing advice on issues related to forest-water relations. A project is underway by which an expert panel will be set up to analyse the problems and opportunities in this field.

Possible roles for Swedish and other development partners?

The many potentials, problems and needs in the wide forest sector touched upon above must, of course, primarily be addressed and handled by Africa's own institutions, governments, regional bodies and civil societies. However, the tasks are of a huge magnitude, many are complex and international and/or regional in nature, but the potential gains if sustainable forest and tree management can be developed in Africa are also enormous.

Africa needs to work with technical and financial development partners in achieving the full potential of forests and trees. Sweden has a long (since the 1960s) and successful experience of working with national and regional partners in Africa in developing and promoting forest management, use and conservation. This applies to overall sector development, small-scale forest industry, research, resource inventories, education, strengthening stakeholder organisations, conservation efforts, policy development, integrated land use, rural development, and other aspects. Over the years, a very significant number of Swedish colleagues have worked in different parts of Africa, and thousands of African professional in the wide natural resources field have benefited from higher degrees and short-term training provided by Swedish institutions. These ties still exist and have become apparent to us in the African Forest Forum while working with Swedish individual and institutional partners in the SFM projects since 2002 and in the current project in particular. Not least have we learnt of how Sweden's own development of sustainable and multiple use forest management has successfully contributed to economic growth and environmental considerations in Sweden.

We are aware of the stress in Swedish strategies for collaboration with Africa to concentrate in "sectors where Swedish comparative advantages are clearly defined and where Swedish competences can be of best use". In our view, the forest sector is undoubtedly one where Sweden has a distinct comparative advantage and it would be eminently suitable to work with African colleagues and partner institutions in fulfilling the potential of the contribution of forests and trees to poverty reduction, economic growth and environmental stability.

1.2 The AFF-KSLA project – goals and work done in the planning phase

In the first phase of the "SFM in Africa" project (2002-2005), it was decided to analyse whether there are relevant lessons to be learnt for sub-Saharan Africa from the development of successful management, use and conservation of forests in Sweden. Several studies were commissioned and discussions held in the course of the project, resulting in, among else, a summary document "*Development of SFM in Sweden – any lessons for Africa?*" (*Lundgren*, 2009). In the second phase of the project (2006-2008), the conclusions and recommendations of this study, together with those of several others, were presented at two sub-regional meetings (in Addis Ababa and Lusaka) organised to disseminate the results from SFM I and agree on sub-regional priorities. At both meetings, participants recommended that activities be initiated along the proposals in the study. This was subsequently endorsed by AFF and KSLA and a first phase of a programme was incorporated as one of seven specific projects in the initial three years of operations of AFF.

The basic point of departure for the programme is that relevant lessons from Sweden are less related to detailed technical issues and more to the processes and mechanisms by which forests in less then 100 years became a primary national asset – the way problems were tackled and solved, opportunities embraced, industries built up, supporting policies and laws were formulated and implemented, forest owners were organised, and how extension, education and research support systems were built up, etc.

The *overall objective* of the programme is:

"to contribute to the economic development and environmental stability of Africa through a more sustainable management, use and conservation of the continent's tree and forest resources".

This will be achieved through a *number of goals* with associated activities, viz.:

- *i.* "to transfer relevant experiences and lessons learnt from the development of SFM in Sweden to select African regions, countries, institutions, organisations, associations and other bodies as identified in the planning phase of the programme";
- *ii.* "to strengthen the capacity of existing bodies and/or build new mechanisms able to adopt and adapt relevant Swedish experiences to African conditions";
- *iii.* "to implement a carefully selected and designed number of pilot projects and activities to verify and adapt the usefulness of Swedish SFM experiences under African conditions; and,

iv. "to lay the foundation for scaling up the results achieved to wider application and use in relevant African countries".

The programme will **focus on the three areas** where Swedish experience is considerable and more or less agro-ecologically and socio-politically neutral, viz.:

- How to run an efficient, participatory and consensus-driven process of developing forest policies and legislation. What institutions and stakeholders are involved, how are problems and opportunities identified, how are priorities set, how is the process supported with facts and figures, how are results implemented and enforced, how are monitoring and evaluation systems put in place, etc.
- How cost-effective and relevant supporting mechanisms are set up for the forest sector at national and regional levels, and how resources are spent on these related to the perceived economic, environmental and societal benefits of the forest and tree sector? Such supporting mechanisms may include research, extension to tree growers, education, training, inventories of forest and tree resources, market information and analysis, phyto-sanitary services, etc.
- How to organise stakeholder groups in ways that will permit effective participation in policy processes, ensure that economic opportunities are addressed in socially and environmentally acceptable ways, and safeguard the interest of members. This may include Forest Owners' and Tree Growers' Associations, Forest Producers' Cooperatives, Community Forest Associations, Forest and Wood Industry Associations (including those dealing with NWFPs), and Associations for promoting forestry, tree planting, forest conservation, and good management in general, etc.

The current two year (Jan 2009 to Dec 2010) *planning and inception phase*, which the current report is summarising, has been centred around studies and proposals on the three foci areas mentioned above. It has a *geographical focus* on Eastern and Southern Africa, partly because Swedish experience of collaboration in forestry/agro-forestry and in rural development in general, is substantial in these regions (see *Lundgren et al.*, 2010), and partly also because a significant number of forestry experts from the regions have professional linkages with colleagues and institutions in Sweden. However, even if the main focus has been on countries in E and S Africa, many of the findings and suggestions are in part relevant also for other countries and regions. Priority has been given to identifying opportunities and problems that might be addressed through collaboration between African and Swedish (and other) partners at regional and sub-regional levels. That is, where such opportunities and problems are shared between countries, either at *political-economic* (EAC, SADC), *agroecological* (savannas, Miombo woodlands, closed forests, humid mountains, coastal zones, small-scale agriculture, agroforestry, tree plantations, etc.), or *regional development programme* (e.g. the Lake Victoria Basin and the Zambezi River Commissions) levels.

The planning phase was carried out in three steps, viz. background studies and analyses, workshops, and development of proposals. The **background studies and analyses** were carried out by the team Peter Gondo (Zimbabwe), Romanus Ishengoma (Tanzania), Bjorn Lundgren (Sweden) and Fred Owino (Kenya). A very wide-ranging set of consultations with various potential stakeholders and interested parties was conducted by the team in 2009 and early 2010, in Ethiopia, Kenya, Uganda, Tanzania, Zambia, Mozambique and Sweden, and with regional organisations (EAC and SADC). In **Appendix 1**, people and institutions consulted are listed. These consultations and several discussion meetings among the team resulted in a draft report with tentative suggestions.

The report and proposals were then presented and discussed at **two sub-regional workshops**, one for eastern Africa in Nairobi on 20-22 April 2010 and one for southern Africa in Lusaka on 27-29 April. Each workshop brought together relevant decision-makers, experts and other actors from Africa, Sweden and from international and regional organisations (AU, FAO, EAC, SADC, etc.), mainly those that are likely partners in various implementation activities coming out of the workshops. Unfortunately, the workshop in Nairobi coincided with the volcanic activities at Iceland which affected air traffic and prevented several intended participants from Sweden and Europe to attend. On the other hand, there were also people from relevant institutions and countries that were "stuck" in Nairobi and chose to spend the time at the workshop. The programmes and lists of participants at the two workshops are found in **Appendix 2**.

In the background document that was presented to and discussed at the two workshops, there were 13 suggested activities that could form the bases for collaborative efforts. These were improved and amended at the workshops' working group and plenary sessions. In addition, two new proposals were identified. Following a meeting of the project team in Nairobi in early November, 2010, these 15 proposals were further developed into *project concept notes*, which were finalised at a meeting in February 2011 and are presented in *Appendix 3* (without their budgets and LFAs).

1.3 How do we proceed from here – vision and work remaining

Each of the 15 proposals has a comprehensive background and justification section, proposed activities, possible partners from Africa and elsewhere, a budget, and an LFA. The proposals vary in content size, length, volume, type of activity and partners involved. The types of activities may involve:

- Further in-depth analyses, outlook studies and consultative meetings focusing on important fields requiring more understanding
- Training arrangements of different lengths and foci.
- Educational programmes, including higher degree programmes.
- Research programmes, including joint activities between African, Swedish and other institutions, and regional Ph.D. programmes.
- Initiating and supporting the development of regional networks and other mechanisms for national institutions and organisations to collaborate on common opportunities and problems in the forestry field.
- Joint ventures in value adding wood industrial developments.
- Internships, on-the-job-training exchanges, visiting arrangements, etc., in both directions.
- Twinning arrangements between African, Swedish and other institutions/associations with similar mandates, e.g. in the fields of policy, production, value adding, trade, consumer and environmental questions, etc.
- Some investments in building up physical infrastructure of institutions essential for SFM, e.g. research and resource inventory/monitoring.
- Workshops, seminars and conferences to present, discuss, monitor and evaluate different aspects of the programme.
- In-depth analyses and studies of various aspects of opportunities and obstacles in achieving SFM, including feasibility studies for up-grading efforts in the final phase of the project.
- Strengthening and giving legitimacy and prominence to already on-going initiatives.

The programme hopefully emerging out of these proposals in mid/late 2011 and early 2012 will involve, in different combinations depending on the actual projects and activities, a large number of **African, Swedish and other partners**. In Africa, these may include regional organisations (e.g. EAC and SADC), Ministries and Government Services in forestry and other relevant fields; politicians and Parliamentary Committees; educational, research and training institutions; community and farmers' organisations; NGOs in the environment and development fields; private enterprises in the fields of wood production, processing and trade; consumer organisations; individual experts and consultants; etc.

From Sweden, some of the relevant potential actors identified include various Ministries, the Federation of Swedish Forest Owners, the Swedish Forest Agency and other relevant government bodies, the Swedish Forest Industries Federation, individual forest companies, various Faculties and Departments of the Swedish University of Agriculture, other universities with relevant expertise related to the economic and social aspects of forestry, consulting companies and individual experts in the wide area of forest related issues, NGOs such as the Swedish Forestry Association, WWF-Sweden, Vi-Forestry Programme, etc. Naturally, it is also assumed that Sida will be involved, both as one (of several) source of finance and as a partner in its own right. It is important to stress that, as the project has evolved, several other interested potential technical and financial partners have shown an interest in the outcome of the project, both in a general sense and in relation to specific project proposals. For example, the National Forest Programme Facility at FAO in Rome, the Swiss Agency for Development and Cooperation (SDC), the University of Helsinki in Finland, the Regional Offices for Africa of both FAO and UNEP, have all showed active interest in working with AFF on some of the ideas coming out of the project.

Since the actual contents of projects and activities in the *implementation phase* (3-10 years, depending on activity) will be finally developed in cooperation with technical and financial partners in the course of 2011 and 2012, it is not possible now to say exactly what will be included. However, it is envisaged that the type of activities and projects will focus on capacity and institution building in a wide sense and that they may include any combination of the types of activities listed above. It is not envisaged that it will involve major forestry "field" projects. Although there is merit in having a common mechanism for supporting and partly coordinating the programme, the individual projects/activities may be contracted to and administrated by different combinations of actors and collaborators in Africa, Sweden and elsewhere, as deemed most appropriate and efficient.

The **vision** is to have a comprehensive regional programme with several components that jointly and in a coordinated way address opportunities of forest and tree resources to contribute effecttively to sustainable economic, social and environmental developments in E & S Africa, and where Swedish and other partners initially will contribute relevant knowledge and experiences for which they have comparative advantages.

1.4 Overview of the characteristics and use of forests in the region

In this section we present a very brief overview of the forests and their uses and importance in the eastern and southern African regions. It should be noted that some of the information refers to the whole EAC and SADC regions (plus Ethiopia), i.e. including the Democratic Republic of Congo, whereas our analysis in the report has concentrated on six countries, none of which has rain forest of the type found in the Congo Basin. Thus, the relevance of our findings and suggestions do not extend to the true rainforest, but they do include the extensive areas of miombo woodlands found in southern DRC.

Extent, composition and distribution

The forests and woodlands of eastern and southern Africa represent a rich and diverse resource base. They cover 226.5 million ha (27.8%) of the region's land area (*FAO*, 2005). The majority of this area (80%) is woodland, 16% is tropical high forest and 2.8 mill ha (1.3%) is forest plantations. The woodlands are predominantly *miombo*, a woodland type that is dominated by the genera *Brachystegia*, *Julbernadia* and *Isoberlinia*. The miombo extends from Tanzania and southern DRC in the north to Zimbabwe in the south, and across the continent from Angola through Zambia to Malawi and Mozambique. Other types of woodlands are mainly deciduous bushland and wooded savannas dominated by *Acacia* and *Commiphora* species that are found in dry areas that receive 600 mm of rainfall or less. Examples of these are found in Ethiopia, Kenya and Tanzania between the highlands and costal areas, and in Namibia, Zambia, Zimbabwe, Botswana and South Africa in the south. The montane rain forests of East Africa, extending down to mountain areas in Malawi, are small in total area but rich in biodiversity and essential in the hydrology of the whole East Africa region (cf. for example the expression "water towers" of the mountains and their forests in Kenya).

The area under forest plantations in the region increased from 2.5 mill ha in 1990 to 2.8 mill ha in 2005. The area is still growing as there is a continuing decline in the production of natural commercial timber. The distribution of the forests and woodland areas is uneven, with the DRC accounting for about 134 million ha including the bulk of the tropical high forests whilst South Africa accounts for nearly 80% of the plantation forests in the region.

Economic importance

Forests and trees are very important to the region as they contribute significantly to the socioeconomic development and environmental protection of the region. They provide a wide range of products and services upon which rural communities and the urban poor depend for their livelihoods and subsistence. Essential forest products include wild foods - such as honey, mushrooms and fruits - medicines, wood fuel, construction poles, and browse and fodder for livestock. Forests and woodlands also provide important global and local environmental services that include watershed protection, wildlife habitats, bio-diversity, carbon sequestration and maintenance of ecosystem functions. Many of these functions and services are critical to the day to day life and operations of urban and rural households and industry. Water from forested catchments, for example, is a key resource for hydro-electric power and human health. As pointed out above (cf. section 1.1) forests also provide considerable support to agriculture through provision of fodder, grazing, and manure. Various products from trees also play a critical safety net function helping rural people avoid extreme poverty and provide a basis for lifting some rural poor out of poverty.

Trade in a range of forest products from the region is already globally significant. In terms of timber production, the Democratic Republic of Congo (DRC) is the major tropical log exporter within the region and one of the top five exporters globally. In most countries, especially in southern Africa, notably South Africa, Zimbabwe and Swaziland, trade in timber and other wood-based products is largely from pine and eucalyptus plantation forests. In recent years, there has been significant growth in the production and trade in non-wood forest products (*FAO*, 2009) from the region. This has been driven by the growing popularity of ethnic foods, traditional medicines, natural and organic foods, and other niche products. However, the vast majority of the non-wood based enterprises operates in the informal sector, although a few products traded regionally and internationally straddle both the formal and informal sectors (*FAO*, 2005). Ethiopia and Kenya are leading exporters of *gum arabic* and valuable flavours and fragrances, e.g. *frankincense*, *opopanax*, and *myrrh*. Ethiopia is one of the leading exporters of *Olabanum* resins.

The region also has many medicinal plants that are used by local people, although a few have now entered the global market. For example, over the past 40 years, *Prunus africana* bark harvest has shifted from subsistence use to large-scale commercial production for international trade. Pepperbark (*Warburgia salutaris* and *W. ugandensis*) used to treat coughs, colds and opportunistic *Candida* infections due to HIV/AIDS, is traded within the region, and is now used to produce a branded commercial product in South Africa.

At least 70-90% of household energy needs and materials for low-cost housing come from forests, woodlands and savannas. Nearly 90% of the rural people in the region rely on forests and trees for their energy needs, mostly as fuelwood and charcoal. Domestic markets for wood fuels (firewood and charcoal) provide an inexpensive source of energy for the region's poor while creating employment opportunities near urban centres. In Zambia, the production and marketing of wood fuel, largely an informal activity carried out by poor households, is estimated at US\$5 billion and employs more than 400 000 people. Several countries in the region, notably Kenya, and to a lesser extent Uganda, Zambia and Zimbabwe are significant producers of woodcarvings. Until recently, few forestry policymakers were aware of the scale or economic value of this trade, which in Kenya involves 50 000-60 000 carvers generating around US\$20 million per year.

Forest ownership

Most of the land and forest resources in eastern and southern Africa are owned by, or under the custodianship of, the state or other public agencies. Private ownership of forests is very low (c. 3.5% of the area) although this has been growing in recent years in some countries due to expansion of private forest plantations. The public forest resources in the region fall into two main categories, namely state or reserved forests and communally owned forests that are held in custodianship by either district councils, traditional leaders or by the state. The area under reserved forests in the region is about 20% but this varies from one country to another. In Uganda, the area under central reserved forests is about 15% whilst a further 15% are found in national parks. In Zimbabwe, the land under reserved forests is about 2.3 % whilst national parks account for 12.3 % of the land (*FAO*, 2005).

Most public land in the region is communally used, with local communities having varied levels of user rights. In recent years there have been efforts to increase the decentralisation of forest management and involvement of local communities in the management of forests as these are central to rural livelihood economies. In many areas, private farmers are growing trees on their farms either to sell them as timber or other commercial wood products, or in various agroforestry combinations to enhance crop and animal production.

2. Forest policies and legislation/institutions to implement them

2.1 Origin, development and current status of forest policies and legislation in Eastern and Southern Africa

2.1.1 Historical background

Except for Ethiopia and Eritrea, forest policies of Eastern and Southern Africa countries borrowed heavily from those of the former colonising countries, mainly Britain and Germany. During colonial times, the countries had policies which revolved around delineation, gazettement and management of state forest and wildlife reserves, with emphasis on regulation of forest extraction and hunting. Accordingly, the forest policies and laws of the colonial administrations focused on protection of state forest reserves.

The countries in the sub-region formulated and implemented very similar forest policies which were heavily influenced by conventions in the home countries – e.g. the Convention for the Preservation of Wild Animals, Birds and Fish in Africa (1900 London Convention) and the Convention Relative to the Preservation of Fauna and Flora in their Natural State (the 1933 London Convention) which prescribed specific guidelines for delineation and protection of forests and wildlife reserves (*Kameri-Mbote et al.*, 1997).

Immediately following the end of World War II, with increased presence of European settlers in some of the countries, significant changes were introduced in forest policies to accommodate the broader range of public forest administration (PFA) activities (*Owino and Ndinga*, 2004). New and more comprehensive forest policies were introduced to cater for more diversified activities of PFAs, in particular, the introduction of forest plantation programmes to meet domestic and industrial wood demands. PFAs also initiated training and research programmes. Thus, between mid-1940s and the beginning of 1960s, the countries pursued policies with dual thrusts of sustaining conservation and production functions of forests. However, there remained notable convergence and uniformity in their policies as 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 era forest policies that even after five decades of independence, some countries continue implementing policies reminiscent of the colonial era.

Upon attaining their independence, most of the countries attempted review of their forest policies in line with the then significantly changed development realities. Thus, from the early to the late 1960s, the newly independent countries launched their "home grown" forest policies and programmes. However, it turned out that the rather hastily promulgated "home grown" policies were no more than poor replicas of the colonial policies thinly coated with politically correct proclamations. Yet, forestry development challenges changed radically since independence. For example, in all the countries, forest ownership and settlement have become politically explosive, forcing many governments to introduce some radical changes in the way forest resources are controlled and managed. These new challenges called for drastic changes in forest and land policies which have not been addressed effectively to date.

Ethiopia and Eritrea have had a unique history in forest policy development and implementation. With no effective colonisation in the past, they are late-comers in national forest policy development. These countries had a predominantly feudal government until the late 1970s. While they had strong programmes, particularly on plantations in highland areas and on tree growing for soil and water management, they had no national forest policies until the mid 1980s. However, even under feudal periods, governments implemented policies on forests much akin to the early colonial period forest policies of other countries in the sub-region. For example, Emperors enforced protection of certain forest reserves for hunting and recreation.

From the mid 1980s, all countries have engaged in review of their forest policies and legislation. The reviews have originated from two successive internationally driven pressures for changes in approaches to SFM. The first wave of reviews was conducted as part of the countries' attempts to comply with actions recommended in the *Tropical Forestry Action Plans* (TFAP) launched in

1985 (*FAO*, 1985). Essentially, TFAP called for the formulation and implementation of more holistic national Forestry Master Plans complete with revised forest policy and legislation. With varying degrees of success, the countries overhauled their policies and legislation which had persisted from their colonial times (except for Ethiopia).

The TFAP driven policy reviews were conducted in a more holistic and participatory manner and were launched together with country Forestry Master Plans. They were formulated on a standard format, largely by foreign experts supported by development partners of the various countries. In subsequent international dialogue on forests, the TFAP driven policies fell under heavy criticism and were eventually abandoned.

The TFAP wave of pressures for changes in approaches to SFM was overtaken by a paradigm shift on sustainable forest management (SFM) ushered in at the United Nation Conference on Environment and Development (UNCED) – also referred to as the Rio Declaration, 1992. All countries signatory to that declaration agreed on certain principles and actions on environment and forests as elaborated in UNCED Agenda 21. For example, Chapter 40 calls upon countries to elaborate and implement comprehensive sustainable development strategies, which attempt to reconcile economic growth, equity in development, and environmental sustainability. Chapter 11 of Agenda 21, together with appended Forest Principles, call on all countries to address a full range of forest specific and forest related issues, all of which focus on radical shifts in approaches to SFM.

Most countries of the sub-region have actively participated in the subsequent global dialogue on forests sustained by the Inter-Governmental Panel on Forest (IPF), the Inter-Governmental Forum on Forests (IFF) and the on-going United Nations Forum on Forests (UNFF).

In response to the recommendations from the UNCED/IPF/IFF/UNFF process, countries of the subregion have conducted a new round of forest policy reviews and institutional reforms, as components of their *nfp processes*, since mid 1990s.

2.1.2 Evolving issues and opportunities at regional and trans-boundary levels

The countries share concern over some emerging issues of regional and trans-boundary nature regarding forests and natural resources management and have, to varying degrees, expressed their commitment to fully address the issues. Currently, the key issues being addressed include:

Threats of deforestation and climate change

Some countries are addressing threats of accelerating deforestation and the issue of climate change in their new forest policies. In a few cases, like in Zambia and Kenya, the new policies and strategic plans to implement the policies set ambitious targets for reversing deforestation.

Initiatives on forest law enforcement and governance (FLEG)

Countries recognise the significant trade distortions and revenue losses from illegal trade in forest products and are participating in various actions within the sub-region and beyond. Currently there is substantial illegal trade in forest products largely from the Democratic Republic of Congo and from Southern Sudan in the sub-region. The situation has reached levels which are prompting some countries to address these aspects in revised policies and legislation. For example, countries of the East African Community (EAC) have recently convened a FLEG roundtable.

Sustainable management of trans-boundary resources

Some expansive natural forests spread across country boundaries. For example, montane forests which are critical for water catchment and for biodiversity conservation spread across Kenya/ Uganda and Kenya/Tanzania boundaries. The dominant natural forest vegetation - miombo woodlands - spread across several countries of Southern Africa. It is imperative that countries which share these trans-boundary forests adopt similar policies and actions for their management and conservation in order to ensure their ecosystem integrity. For example, this is the thrust of IUCN's work in the region. This is working through collaborative forest management in its initiatives, such as the Kibale and Semuliki Conservation and Development Project, which is trying to restore the linkages between rural people and forests, while retaining the integrity of the ecosystems. Similarly, IUCN is in the process of developing a trans-boundary ecosystem project for the conservation and sustainable management of Mt. Elgon, which builds on the successes of national projects in Kenya and Uganda.

Enhanced community participation and benefit

The new forest policies of the countries accord special emphasis on increasing participation and benefits to forest adjacent communities, through collaborative forest management (CFM). Indeed some countries, like Tanzania, have given this aspect a special focus in their revised policies. Since some of the beneficiary communities spread across boundaries, there will be increasing pressures on countries to adopt policies on community benefits which work across boundaries. Collaboration and community involvement are the cornerstones of many recent approaches to forest management. IUCN and other players have promoted and supported sub-regional initiatives to create a better understanding of the importance of trees and forests to livelihood security. Through such efforts, several countries have already developed strategies and plans to capitalise on the role of forests and trees in livelihood security through collaborative agreements for joint management of and/or access to resources. Good examples are to be found in the Tanga and the Rufiji Environmental Management Projects in Tanzania. IUCN has convened sub-regional workshops for lesson learning based on outputs from such projects.

Likewise, some countries are focusing on new and emerging opportunities for the forest sector and reviewing their policies to best capture the opportunities. The emerging opportunities include:

Trade and common markets

The 14-member country **Common Market for Eastern and Southern Africa** (COMESA) is already working on a forestry development and management strategy that will help sustain management of forestry products, services and climate change in the COMESA region. COMESA recognises that trade in a range of forest products from the region is already globally significant, according to the latest newsletter of the trading block, which said that COMESA member States were among the leading exporters of timber and non-timber forest products. The neighbouring Democratic Republic of Congo, for example, is the fifth largest exporter of tropical logs and a significant proportion of the logs are exported through Eastern and Southern Africa ports.

Sudan provides 50 percent of global supplies of gum Arabic, while Ethiopia, Eritrea, Sudan and Kenya are leading exporters in a number of valuable flavours and fragrances. Other COMESA member countries that are leading in the export of forestry products are Madagascar, Burundi, Kenya and DRC, which export the medicinal bark from the tree *Prunus africana*. COMESA is a global leader in the production of vanilla (dominated by Madagascar) and ylang-ylang for perfumes (dominated by the Comoros).

Recently, COMESA and the Centre for International Forestry Research (CIFOR) has released a publication on "Sustainable Trade and Management of Forest Products and Services in the COMESA Region" which attempts to harmonise and strengthen member country efforts in forest product trade. Moreover, COMESA entered into a partnership with the *Alliance for Commodity Trade in Eastern and Southern Africa* (ACTESA) for joint promotion of market access. Member countries of the Treaty of East Africa Cooperation (EAC) have recently ratified trade tariffs agreement which also cover forest products. It is important for countries to address these common market initiatives in their new policies, particularly as they relate to tariffs and export barriers.

Actions under umbrella sub-regional organisations

There have been some recent initiatives for member countries of the **Treaty of East Africa Cooperation** (Kenya, Uganda, Tanzania, Rwanda and Burundi) to consult and to move towards common policies and strategies in natural resource management (NRM), including forests. For example, the on-going Lake Victoria Environment Management Programme (LVEMP) is forging harmonised approaches to NRM in the entire Lake Basin. The Nile Basin Initiative (NBI) is another organisation which promotes and supports policy harmonisation on sustainable management of natural resources in the catchment areas for Nile River (in Kenya, Uganda, Tanzania, Rwanda, Burundi and Ethiopia). The member countries of the **Southern Africa Development Community** (SADC) has developed and adopted a common forest policy and strategy.

In formulating their new forest policies, countries need to ensure congruence with policies and strategies of their respective sub-regional organisations. Indeed, such sub-regional organisations offer good opportunities for harmonisation of policies and strategies across countries with potential

of attracting more substantial support for the implementation of the policies and strategies (see the case of Lake Victoria Environment Management Programme highlighted elsewhere in this report).

Significant actions under an EAC umbrella have included IUCN support for Policy Dialogue through bi-annual meetings of the East African Directors of Forestry and of Forestry Research and Heads of Forest Departments in Universities form an important component of EARP's forest policy work. This helped to develop the **East African Forestry Network** which was acknowledged by the East African Community and was strongly linked to their Environment and Natural Resource Committee of EAC. In 2002, a similar meeting was held with the Directors of Conservation (forestry, wildlife, fishery, and environment) and their counterparts in economic planning. This served to highlight the importance of linking conservation planning and valuation to broader, national, macro-economic planning.

2.1.3 Rationale and justification for policy, legislation and institutional reviews

In section 2.1.1 above, the historical roots of forest policies in Eastern and Southern Africa are outlined. The current rationales and justifications for forest policy developments and reviews are described here.

Forest policies of newly independent nations in Eastern and Southern Africa had to address the many conflicts encountered in forest conservation and utilisation stemming from the weak or nonexistent linkages between colonial era forest policies/legislations and traditional institutional arrangements for natural resources rights and management (*Adeyoju*, 1981; *Owino*, 1990; *Ribot*, 1999). Essentially, colonial era policies and legislation had locked out indigenous populations from their land and livelihood safety nets and had precipitated serious political tension in many countries or parts within countries. For example, the protracted Mau Mau liberation war in Kenya in the early/mid-1950s was triggered by alienation of people from government forest reserves and farming settlers in the "white highlands". The Land Reform of 1970 by the Derge in Ethiopia was an important turning point for forest policy development of the same proportion as other countries experienced at independence.

Countries continued to exchange experience on policy development, legislation and institutional frameworks in fora such as the Commonwealth Forestry Association. In fact, one of the earliest continental 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" (*OAU/IUCN*, 1968). Thus, soon after their independence African countries attempted to harmonise their forestry policies and development strategies.

Most of the countries were also parties to important regional and continental agreements and/or consensus on forestry development. For example, under the aegis of the *African Forestry and Wildlife Commission* (AFWC), most countries signed the 1968 agreement on forests, pledging to observe the requirements for their forest reserves. Under the Organization for African Unity (OAU) and the United Nations Economic Commission for Africa (ECA), most of the 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 1980s, global concern with deforestation in tropical developing countries culminated in a major international initiative, the **Tropical Forest Action Plan** (TFAP), according to which countries attempted more comprehensive and holistic Forest Sector Master Plans as described in section 2.1.1 above. Suffice it to stress that many of the countries made little progress in implementing their master plans, partly because of the overarching economic structural reform programmes (SAPs).

More recently, most countries have conducted more comprehensive forest policy reviews in line with recommendations of the UNCED/IPF/IFF/UNFF process. They have, to varying degrees of success, adopted internationally agreed guidelines for formulating and implementing their national forest programmes (nfp) to include the following key elements:

- Sector review, complemented by policy and institutional reforms, to establish an understanding
 of the forest sector and its relations and linkages to other sectors in the context of national
 development, and to establish an execution of necessary actions in dialogue with stakeholders;
- A strategic plan for the forest sector.
- Investment programme, including both public investments and incentives for private and nongovernmental sectors;
- Capacity building programme, to assist the governmental and non-governmental sectors in fulfilling their roles and mandates;
- Monitoring and evaluation to provide continuous feedback on the implementation, impacts and efficiency (according to set criteria and indicators).

Furthermore, most countries have taken steps to broaden their forest policies and forestry development strategies beyond management of forest reserves and plantations to more access and participatory strategies, including the joint forest management (JFM) or collaborative forest management (CFM) strategies (*Wily*, 2002; *Kajembe et al.*, 2003). For example, in line with the **Jakarta Declaration on Social Aspects of Forestry**, most 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 of most countries, in the last three decades.

Finally, the accelerating deforestation and illegal forest activities in many countries have led governments to question the effectiveness of their PFAs. Most countries have recognised the urgent need for comprehensive institutional reviews of their PFAs in order to stem the alarming destruction and illegal activities and to move towards sustainable forest management (SFM). Some countries are already participating in sub-regional initiatives like the *African Forest Law Enforcement and Governance* (AFLEG), primarily countries within the EAC and SADC blocks.

The changing forest policy dimensions above have been matched with forest legislation changes to support the implementation of forest policies over time. In the colonial period, forest legislations in most countries were based on English law reasoned on the general contexts of nuisance, trespass and protection of public property (*Okoth-Ogendo*, 1980; *Adeyoju*, 1981). Forest adjacent communities merely enjoyed controlled user rights in situations where authority to manage public forests was highly centralised. Since independence, there has been a general trend of devolving forest land ownership and management responsibility *vis-à-vis* the interest and benefits to forest adjacent communities. Several countries have reviewed their constitutions, often introducing new elements in structures of governance and in land ownership (Mozambique in 1990, Zambia in 1991, Ethiopia in 1992, Uganda in 1995, Kenya in 2010, etc.). Several countries have also promulgated new land laws with new elements which have called for review of forest laws (Uganda Land Act of 1998, Ethiopia Rural Lands Proclamation of 1997, Zambia Land Act, 1995, Mozambique Land Act, 1997, Tanzania Land Act, 1999, Tanzania Village Land Act, 1994, Mozambique Forestry and Wildlife Act, 1999, Zambia Forest Act, 1999, Uganda Forest Act, 2002, Kenya Forest Act, 2005, etc.).

From the 1970s, many countries made significant changes in 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 Kenya, Uganda, Zambia, etc., introduced strong forest extension units within their PFA. In addition, most countries expanded their PFA functions to include training and research programmes.

2.1.4 Driving forces in policy, legislation and institutional reforms

All the countries have conducted reviews of their forest policies and institutional frameworks in the last two decades. Some, like Zambia and Tanzania, are now in the second round of forest policy and institutional review. Why the sudden wake up and renewed interest in the policy and institutional reviews?

Increasing population and poverty

All countries have sustained high population growth rates with a high proportion of the population remaining rural and poor, and relying increasingly on woody vegetation and forest land for their livelihood. As a consequence, forests of the region have come under increasing pressures, and

many areas have been severely encroached or degraded. In some countries, like Kenya, the government has been pushed to degazette reserved forest (see story of the Mau Forest in Kenya below). In others, forest management suffers from intense conflict of interest between government and local populations/entrepreneurs. So intense can the conflicts of interest become that Uganda reported killing of seven forest field staff in 2009 alone.

All the countries must address the vicious cycle of population increase, poverty and environmental degradation in formulation and implementation of their forest policies. This cycle is further complicated by historical forest ownership/tenure issues. New forest policies and legislation must be informed by the reality that, with increasing democratisation, the forest adjacent communities are bargaining beyond access and use rights into forest ownership (*Sunderlin et al.* 2008).

The Mau Forest Complex forms the largest closed-canopy forest ecosystem of Kenya covering a total area of some 400 000 ha. Being the single most important water catchment in Rift Valley and western Kenya, it is a natural asset of national importance. Its forests provide critical ecological services to the country, in terms of water storage; river flow regulation; flood mitigation; recharge of groundwater; reduced soil erosion and siltation; water purification; conservation of biodiversity; and, micro-climate regulation. Through these ecological services, the Mau Forest Complex supports key economic sectors in Rift Valley and western Kenya, including energy, tourism, agriculture, and industries. In addition, the Mau Forest Complex helps secure the provision of water supply to urban areas and supports to the livelihoods of millions of people living in the rural areas. It is the home of a minority group of indigenous forest dwellers, the Ogiek, and also provides livelihood support to many other communities living in the immediate surrounding of the forests.

Despite its critical importance for sustaining current and future economic development, the Mau Forest Complex has been impacted by extensive irregular and ill-planned settlements, as well as illegal forest resources extraction. Degazettement of forest reserves (excision) and continuous widespread encroachments have led to the destruction of some 104,000 hectares representing over 24% of the Mau Complex area over the last 15 years. In 2001 alone, 61,023 hectares of forest in the Mau Complex were excised. In addition, an estimated 43,700 hectares have been encroached in the remaining protected forests of the Mau Complex.

Response to macro-economic changes

All the countries have faced drastic declines in funding for their forest sectors, being partly the outcome of economic structural adjustment programmes (SAP) of the 1980s and 1990s, and the unwillingness by Governments to give priority to the sector. Despite some high profile statements by leaders on the importance of forests, government budget allocations have declined sharply with SAP implementation. Moreover, support from their development partners also declined, forcing public forest administrations (PFA) to undertake major restructuring and repositioning in order to maintain minimum discharge of their functions. For example, in the mid 1990s, the then Kenya Forest Department faced a sudden withdrawal of donor funding resulting in a major staff downsizing and near abandonment of its plantation programme. The then Ethiopia Forest Department was affected so badly that it has not recovered to date.

The negative impact of the macro-economic changes lingers in all the countries to data. However, through adoption of UNCED/IPF/IFF/UNFF recommended actions, new players (communities and the private sector) are joining to partly salvage the situation.

Response to changes structures of government and overarching laws

Many countries have introduced new government structures and functions, which also call for forest policy and institutional reviews. Moreover, countries are exploring various ways to enhance product and service delivery in the sector. For example, in 1995 Uganda adopted a new constitution, which, among other issues, was more explicit on overall governance structure providing for devolution of powers to the district (LC3) level. This was shortly followed by a new Local Government Act of 1997 that provides the legal framework for decentralisation and allows devolution of powers to the districts and to lower level of councils of government. Uganda also introduced a new Land Act of 1998 providing for better regulation of land tenure and management of natural resources throughout the country. Kenya is pursuing changes in government structure very similar to those in Uganda.

In Ethiopia, a succession of land reforms has become important turning points for forest policy development. The 1975 land reform by the Derge (Proclamation No. 31/1975) introduced public ownership of all rural land and prohibition of transfer of user rights by sale, exchange or succession. The power to administer land was vested in the Ministry of Land Reform and Administration (MLRA) through Peasant Associations at grass root level. The proclamation also limited the maximum size of land a family can hold to 10 ha. After the downfall of the Derge, the Transitional Government of Ethiopia introduced a new federal constitution which was adopted in 1995. This provided for a highly devolved structure of government with regional parliaments. However, the federal constitution still left all rural land to be the property of the state. The Ethiopian Government formulated a development strategy known as the "agriculture development led industrialisation" (ADLI) which was launched in 1994/95. ADLI is described as focusing on increasing the productivity of "smallholder farmers" through the diffusion of fertilisers and improved seeds, together with the establishment of credit schemes as well as the expansion of infrastructure - the road system, improvement of primary health care, primary education and water supply. In some ways, focus on ADLI pushed forestry issues further to the periphery. Only recently has the Ethiopian government unveiled a national strategy for forest sector development through "Forest Development, Conservation and Utilisation Proclamation No. 542/2007." This proclamation makes drastic departures from previous ones in (i) recognising two categories of forests - private forests and state forest, and (ii) promoting private sector forestry enterprise through concessions. With the succession of major reforms in land and tree tenure, developing forest policies has been a unique challenge (Nega et al., 2002).

Conformity with internationally agreed on actions on forests

The rationale and justification for policy reviews which have recently been concluded or which are on-going are the quest by individual countries to effectively address new national development challenges impacting on their forests and forest sectors. Before the UNCED/IPF/IFF/UNFF dialogue on forests, forest policies focused primarily on the forest resource base, and on continuous flow of products and services and institutional frameworks to ensure this. The new forest paradigm now calls for the extension of the above into levels of environmental controls and into social and economic effects. There is awareness and strong interest in countries of the sub-region to review their forest policies in line with more holistic approaches recommended by the UNCED/IPF/IFF/ UNFF process. This rationale for policy change has taken strong root in countries like Uganda, Tanzania, Kenya, Mozambique and Zambia and has attracted support from development partners like Finland (Zambia and Kenya), United Kingdom (Uganda) and the National Forest Programme Facility (several countries).

Strengthening community based forest management practices

Most countries in the sub-region have pursued overall policies of decentralisation of government service delivery in congruence with increasingly devolved systems of governance. For example, in 1983, Kenya launched its "District Focus Strategy for Rural Development". Essentially, these strategies call for cross-sectoral planning and co-ordination of implementation at the district level, as opposed to headquarters. Tanzania has had a long history of decentralised 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 recognised in law (*Kihiyo and Kajembe*, 2000; *Kajembe et al.*, 2003).

It is instructive to assess the effects of this decentralisation policy on service delivery (to the forest level) by existing PFAs. Trends in adoption of decentralisation and devolution of PFA functions and their impacts in forest management in developing countries was the subject of a major review by FAO (*Enters and Anderson*, 1999; *Onibon et al.*, 1999; *Lindsay*, 1999; *Ribot*, 1999). It is also pertinent to take into account the finding of an Expert Consultation on Forest Policies in Africa, organised by FAO and CIFOR in Accra, Ghana, in 1995, which noted that one of the major constraints to SFM was over-centralisation of forest administrations (*FAO*, 1996). The real challenge for all the countries pursuing decentralised governance policies is to review their forest policies, legislation and institutional frameworks to fall in line with new government structures. Perhaps this challenge is greatest for Ethiopia where the regional units of governance are more proactive in driving policies against a much weakened central PFA.

Countries of Eastern and Southern Africa are leaders in championing collaborative forest management (CFM) and community based forest management (CBFM). There is a dominant policy shift to engaging local communities in forest management for their enhanced benefit (*Nkhata*, 1997; *Wily*,

2000; *Kajembe et al*, 2003). This policy shift calls for some drastic forest policy, legislation and institutional reviews (*Kayambazinthu et al*, 2003; *Shackleton and Campbell*, 2001; *Wily*, 2002). Tanzania has moved faster than other countries in institutionalising CFM and CBFM, perhaps because of its long experience with village/community centred development strategies. However, other countries are already implementing their own brands of CFM and CBFM. The sub-region is fertile ground for experience sharing.

Calls for establishment of more efficient and client-responsive institutions

Over time, several countries have explored radical transformation of their PFA to become more efficient and less dependent on government Treasury Departments. For example, learning lessons from neighbouring Zimbabwe and Zambia established a parastatal organisation – Zambia Forestry and Forest Industries Corporation (ZAFFICO) in 1982 to replace the then Plantation Division of Zambia Forest Department. Under its Market Reforms and Parastatal Restructuring programme, the Government of Tanzania opted for the establishment of a more business-like Forestry Commission (*Bagachwa*, 1992). However, for some reasons, this has not been implemented.

In the last two decades, some countries have implemented drastic reforms of their PFAs. Firstly, many counties have decentralised PFA service delivery, particularly extension services, to impact on all regions equitably. Secondly, some countries have reformed their PFA through devolved authority and responsibility for forest management. Thirdly, some countries have created new "business-like" semi-autonomous bodies to take primary responsibility for productive functions of the forest resource base. Good examples include the establishment of the Uganda National Forest Authority (NFA) in 2004 and of the Kenya Forest Service (KFS) in 2007. It has been reported that Tanzania, Zambia and Rwanda are taking actions towards establishing similar institutions.

The establishment of these semi-autonomous bodies is predicated on policy and legislation changes to facilitate and legalise their operations. Some countries have attracted support from development partners for these institutional reforms – DfID (UK) and NORAD (Uganda), DIDC of Finland (Zambia and Kenya).

2.1.5 Impact of changing economic, environmental and social values of forests

Impact of changing economic importance and value

In the distant past, forests and trees were common and open access assets of little economic value. Wood and NWFPs were collected for household consumption and for local trade by forest adjacent communities. PFAs and entrepreneurs only focused on economic valuation and taxation of wood from plantations (mainly of fast-growing exotic tree species) and of very few high economic value indigenous tree species like mahogany, mpingo, cedar, podo, etc. Indeed, forest product pricing and trading regulations covered a very limited range of timber producing species. Extraction and trade in the wide range of other wood and NWFPs have remained in the informal sector, with significant exceptions of Gum Arabic and charcoal which have been traded under some regulation.

The above situation, which is common to all counties in the region, has resulted in the channelling of a substantial proportion of total forest revenue to the informal sector. Government Treasuries receive only small parts of total forest revenue. This also explains why government estimates of the contribution of the forest sector to GDP growth remains low for all countries. This, in turn, has serious consequences for the sector since contributions to GDP do influence government budget allocation. Thus, PFAs end up receiving less financial resources to manage the forests.

Many countries recognise that the situation is a major limitation to achieving SFM and are already taking actions to shift other streams of forest revenue from the informal to the formal sector of the economy. An example is the set of actions being taken by Kenya to regulate charcoal production, trade and export, the value of which is estimated to stand at some USD 425 million per annum (cf. page 7). Much of this trade has been in the informal sector. The Kenya Forest Service has just introduced new policy and legislation to shift some of this revenue stream to the formal sector. This is a whole new area for forest policy studies and legislation review.

Another important area for studies and review relates to the increasing commercialisation of forest products and services. Many development programmes are pushing this as a way to linking sustainable forest management to livelihood improvement. Throughout the region, rural people,

and women in particular, have for decades traded in a wide range of natural products, primarily for sale in local markets. Specific strategies are now being developed by the development community to provide alternative sources of income to rural households through commercialisation and trade. Good examples include Lulu (from *Vitellaria paradoxa*), honey, caterpillars, etc. New markets, specifically those with external linkages, such as export of source certified products, create new income opportunities. However, where there is uncertain or weak tenure over resources, such commercialisation efforts can lead to unsustainable harvesting. This calls for dedicated policy studies and legislation reviews to include, in some cases, Intellectual Property Rights.

Impact of changing environmental importance and value

Since the Rio Earth negotiations (*UNCED*, 1992), countries all over the world have paid more attention to deriving some tangible economic benefits from environmental services provided by their forests and other natural resources. The "polluter pays principle" was the buzz word at the Rio meeting and took strong roots in the UNCED Agenda 21. Since then, there has been a flurry of global, regional and national reviews of payments for ecosystem services (PES) mechanisms. There have been few studies and relatively little action in Eastern and Southern Africa to derive benefits from PES. Notable efforts in this direction have included the initiative by the United Nations Economic Commission for Africa (UNECA) to develop a common framework for valuation of environmental services and their integration in national accounting systems.

One area of great concern to countries is water use by plantations and trees outside forests. Policy makers are re-assessing forest plantations and other forms of tree growing against water availability and its future projections. Some countries may soon pose restrictions on development of new plantations based on such concerns (as is already the case in South Africa). There are big policy issues to be resolved under this forestry development scenario, including promotion and support of tree growing in agroforestry, increasing production from natural forests, forest product substitution, etc.

Payments for ecosystem services (PES) schemes reward people through subsidies or market payments derived from other people who benefit from the services such as water quality, carbon sequestration, biodiversity and flood control by wetlands. Payments for ecosystem services generally seek to create incentives for land managers rather than criminalising their undesirable actions through legislation. The key innovation that distinguishes PES from other incentive-based approaches is that there is a contract between the user (buyer) of the ecosystem service and the supplier of that service.

Perhaps the most comprehensive study has been conducted by the Economic Research Bureau of the University of Dar-es-Salaam, Tanzania (*Tanzania Ministry of Natural Resources and Tourism*, 2006). The study aimed at establishing a mechanism for Payment for Water Environmental Services (PWES) in Tanzania using the Eastern Arc Mountain Forests and the Rufiji Basin as a whole, as the basis for this work. The overall goal of developing PWES is to supplement efforts by forest and water resource managers through stakeholder participation of all those who use the ecological services of the forest and those who manage the forest catchment areas as well as the riverbanks and other water sources to ensure a sustainable flow of hydrological services through mobilising financial resources for their management, based on the benefits they generate. Suffice it to highlight the main conclusions of this study that:

- In order for the PWES implementation to be successful, sensitisation and awareness creation of the stakeholders in integrated water resources management and utilisation are vital;
- The system of payment for and the management of water environmental services should be more transparent; and
- The success of PWES for the Rufiji Basin and other basins in the country therefore depends on accommodating necessary adjustments to the existing institutional structure and regulations.

Other countries are also exploring benefits from PES. For example, in Kenya PES arrangements are already being piloted for water supply to the capital city, Nairobi. Such arrangements are soon to be extended to other Kenyan "water towers". Like in the case of Rufiji River, Kenya is grappling with necessary policy and institutional changes in the water, forest, energy and environment sectors.

All the countries share great concern over the dire predictions regarding the impacts of climate and have participated in global and regional negotiations on actions needed. Some countries have

developed national and local-level strategies and plans to address climate consequences. Still, there are big knowledge gaps and policy issues to be resolved in effective mitigation and adaptation to climate change. Already, DfID and the Canadian International Development Research Centre (IDRC) are supporting the Climate Change Adaptation in Africa (CCAA) programme. This programme was set up to improve research on climate change adaptation in a range of African settings. A number of action research projects have been funded and more are under consideration. CCAA aims at facilitating interactions between African scientists, researchers and policy-makers around climate change issues.

Carbon forestry is already being piloted in several countries (Tanzania, Mozambique, Uganda, Kenya, etc.). While there remain many technical issues to be resolved around forest/tree carbon capture, its measurement and trading, several countries already have carbon trading projects. However, there are important policy issues to be addressed including:

- Requirement of large and long-term concessions for carbon capture *vis-à-vis* immediate competing needs for agriculture and forestry production;
- Restriction of access (for grazing and livelihood extraction) over land set aside for carbon capture; and,
- Ensuring that that the proceeds from carbon trading actually supports SFM.

These policy issues should be fully addressed as the countries embrace carbon forestry projects. Moreover, countries need to address broader policy issues for PES. There is a need for studying whether, and under what circumstances, PES will be able to compensate fully for foregone alternative land uses.

Impact of changing socio-political importance and value

Political leaderships in most countries are already highly sensitised to global concerns over deforestation and climate change. Actions on forests are in the political limelight in several countries. This presents both great opportunities and risks for PFAs and the forest manager. Opportunities include possible mobilisation of population and financial resources, facilitation of policy and legislation reviews, improved forest governance, etc. The great risk is possible political interference in PFA discharge of its functions. The challenge for PFA and forest managers is to balance interests and stay on course for SFM (*Westoby*, 1985). Countries should take full advantage of the current highest level interest to formulate robust policies and legislation while forests and forestry enjoy the limelight.

The push for community engagement in forest management through CFM and other models has brought communities closer to PFAs. Tangible benefits from CFM activities have helped to change community perception of value of forests and trees.

2.1.6 Processes and mechanisms of developing and administering forest policies, and legislation and institutions to implement such policies

There is great variation in processes and mechanisms which the countries have adopted in formulating and implementing their revised policies, legislation and institutional reforms. Many countries had made earlier attempts through the TFAP Forest Master Plans. The essential departure of TFAP Master Plans from previous processes was planning based on sector wide analysis with some future projections. Countries adopted a common template which had been proposed by FAO.

More recently, many countries have adopted processes and mechanisms recommended by UNCED/ IPF/IFF/UNFF according to which countries formulate and implement their national forest programmes (nfp) based on multi-stakeholder and cross-sectoral consultation processes. The first step in nfp development is policy, legislation and institutional reforms. This should be followed by a **strategic plan** for the forest sector, an **investment programme**, including both public investments and incentives for private and non-governmental sectors, a **capacity building programme**, to assist the governmental and non-governmental sectors in fulfilling their roles and mandates, and a **monitoring and evaluation system** to provide continuous feedback on the implementation, impacts and efficiency (according to set criteria and indicators).

So far, only a few countries have formulated and implemented their nfps within the framework above – notably Uganda which had strong support from donors. Others have made good attempts

at achieving the same, including use of some shortcuts in the process. For example, Mozambique formulated a comprehensive nfp but has not implemented it to date. Tanzania's nfp unit is set-up with a coordination unit (CU) and steering committee (SC) housed within the Forestry and Beekeeping Division under the Ministry of Natural Resources and Tourism. These structures are well positioned within the forest authority to give access to high level decision-makers within and beyond the sector. Some initial observations revealed that:

- The CU is well funded externally (by international donors) and supported internally (by forestry department staff).
- The SC comprises of a wide range of high-level interests across government sectors, but representation of NGOs and private sector is weak.
- The SC acts both as an overseer and consultative body for negotiating and clarifying critical matters for forestry development.
- The NFP did not build on existing negotiation platforms within the country (a Forestry Advisors Group) because it was too large in number, a challenge to the conventional wisdom of NFP operational guidelines.
- There is an overlap in terms of reference that must be addressed between the two institutional structures, the SC and the Forestry Advisors Group, and legal amendments may be required.
- There has been little heated negotiation within either of the two structures regarding contentious issues such as privatisation of resources. Rather, it was an information sharing platform that was able to receive guidance and support from external sectors such as the planning commission and financial departments.
- No National Consultative Forum formally exists; however, it will be recommended that one comprising of national partners only be established to assist in building national consensus.
- A "donor support club" is in place to keep the process alive, as well as being a key actor in both contributions to negotiations (sometimes too much) and mobilising resources.

Zambia's nfp process is quite different from Tanzania in the sense that the nfp unit is not firmly positioned or institutionalised within the Forestry Department. The nfp formally exists as a document, but the programme has not been placed within any structures (e.g. CU or SC) either in the department or parent Ministry of Tourism, Environment and Natural Resources. Some initial observations revealed:

- No CU exists, but a coordinator who has many other tasks is a focal point for inquiry. There is a
 desire to establish a secretariat that would act as a CU comprising of four forest officers if
 finances permit.
- A well-represented SC was disbanded at the end of the formulation stage, an indicator of it being more a project than an ongoing programme.
- The SC provided little space for discussing technical matters and lacked sufficient knowledge amongst its participants to contribute to debates.
- No national consultative forum exists, but one is desired if finances permit.
- No donor support club harnessing the momentum of the nfp process as they remain engaged in a wish list, ad hoc and uncoordinated approach of support.

Kenya and Ethiopia have no functional nfp units although Kenya is benefiting from the NFP Facility for some specific policy and planning activities.

It is apparent that the nfp process as elaborated in 2.1.3 above is not easily achievable in all countries. The notable success reported for Uganda was largely due to support and shepherding from development partners. However, the attempts at nfp processes by some of the countries have offered opportunities for lessons learning. The key lessons so far are:

- Need to establish a well functioning nfp coordination unit within the national PFA. The coordination unit should be manned by a motivated nfp Team or Steering Group to ensure quality management and effective multi stakeholder and cross sectoral engagement;
- The nfp coordination unit should embrace iterative planning procedures and decision making processes which are participatory and transparent;
- Country nfp should be formulated and implemented within the context of overall national development strategies such as poverty reduction strategy plans, Vision 2020 (Kenya), etc.;
- If the nfp process is supported by development partners, they must be designed and implemented to ensure country-based participatory process and ownership;
- For most of the countries, the necessary policy and institutional reforms have proved most challenging and have retarded nfp progress. In some cases, there has been stiff resistance

from within PFAs, indicating a need for semi-autonomous sector reform secretariats (Uganda, Kenya);

- There is need for sustained high level political support for the process. In this regard, high level policy advocacy by regional and continental organisations like AFF, IGAD, SADC, EAC would prove most beneficial; and,
- There is great potential to increase impact through sharing of experiences among countries in frequent meetings among nfp Teams.

In most countries new policies and laws have been developed to accommodate new approaches to SFM. Although revised policies emphasise the cross-sectoral approaches for implementation, lots of competition between sectors for finances and "institutional turf war" are obstacles that may always exist but need to be worked around at all levels of government.

2.1.7 National highlights

Ethiopia. Much deforestation in the central highlands of Ethiopia occurred under successive feudal governments before 1975. The Proclamation No. 31 of 1975 by the Derge was a turning point as it introduced radical land reforms which have shaped forestry development to date. The provisions of the proclamation included: public ownership of all rural lands; distribution of private land to the tiller; prohibitions on transfer-of-use rights by sale, exchange, succession, mortgage or lease, except upon death and only then to a wife, husband or children of the deceased; and in the case of communal lands, possession rights over the land for those working the land at the time of the reform. The power of administering land was vested in the Ministry of Land Reform and Administration (MLRA) through Peasant Associations at the grassroots level. The law provided 10 ha of land as the maximum a family can possess. This proclamation set major land and tree tenure constraints for individual farmers and communities to engage in tree growing and forest protection.

From 1975 to 1993, forest policy development and implementation was dispensed from the then Forestry Department of the Ministry of Agriculture. In 1994, the government elevated the status of forestry according it a more prominent position under new Ministry of Environment and Natural Resources. But this was short lived as the government also decided to review its rural land policy and introduced Ethiopia's agricultural development led industrialisation policy (ADLI) in 1994/95. ADLI focused on increasing the productivity of "smallholder farmers" through the diffusion of fertilisers and improved seeds, together with the establishment of credit schemes as well as the expansion of infrastructure - the road system, improvement of primary health care, primary education and water supply. The strategy viewed agriculture as the engine of growth, based on its potentially superior growth linkages, surplus generation, market creation, and provision of raw materials and foreign exchange. With increased focus on ADLI, the stature of PFA sharply declined and, in 1995, forest policy development and implementation reverted to the Ministry of Agriculture and Rural Development. With this, PFA lost its previous departmental status in the ministry and operated as a "Forestry Team". This loss in PFA stature has continued to the present with PFA reduced to the level of one of the 4 Case Teams within one of the 4 Sectors (Directorates) within the Ministry of Agriculture and Rural Development. This is the lowest stature for PFA in all the countries of Eastern and Southern Africa.

The new federal constitution, which was adopted in 1995, upholds the provision of the 1975 Proclamation that all land is publicly owned. In 2007, the Ethiopian government introduced a national strategy for forest sector development, the "Forest Development, Conservation and Utilisation Proclamation No. 542/2007." This makes drastic departure from previous ones in (i) recognising two categories of forests – private forests and state forest, and (ii) promoting private sector forestry enterprise through concessions.

In general, Ethiopia's approach to policy, legislation and institutional reviews has been through proclamations. The only exception was when the Ethiopia National Forest Master Plan was developed in a participatory manner. Therefore, Ethiopia deserves special consideration in any initiative aimed at strengthening nfp process.

Kenya's PFA had a steady growth until the early 1990s when effects of the economic structural adjustment programme set in. The Kenya Forest Master Plan was developed between 1991 and 1994 but was not implemented. It suggested converting portions of the natural forests to plantations of fast-growing exotic species. Kenya's plantation programme relied until then heavily on donor support (World Bank) and upon the sudden withdrawal of this support, the plantation

programme collapsed and the area under plantations has sharply declined, from c 160 000 ha to less than 80 000 ha today. As a result, many forest industry enterprises have closed down and/or relocated to other countries. The remaining industries are operating under great uncertainty.

It was against this background that the then Ministry of Environment, Natural Resources and Wildlife engaged stakeholders in discussions on the challenges and opportunities in our forest sector with the aim of mapping out the way forward for the sector. A new Forest Act was promulgated in 2005 with, among others, the provision for establishment of a parastatal organisation – the Kenya Forest Service (KFS). However, the new law was introduced before a new forest policy was adopted – an interesting case of law driving policy. KFS was established in 2007 but got off to a slow start due to institutional inertia (KFS was tied down to start with seconded staff from the defunct Forest Department). Moreover, there remain important policy issues to be resolved with regard to (i) policy oversight for NFA and (ii) functional links between KFS and forest extension services outside gazetted forests.

In general, Kenya has made commendable efforts in embracing participatory approaches in policy, legislation and institutional reforms consultations. For these purposes, Kenya has continued to benefit from support from Finland and the NFP Facility.

Uganda's first white paper on forestry development and the Uganda Forest Act were promulgated in 1921. This first forest policy laid heavy emphasis on conservation and sustainable exploitation of the substantial forest wealth, particularly the tropical high forest (THF). From the mid 1940s to the time of independence in 1962, the Forest Department attracted the services of some of the world's most famous forest scientists, ranging from botanists, ecologists, to wood utilization experts and administrators. In that period, the Uganda Forest Department established distinction in managing the nation's forest resources as guided by the best science.

In the early 1970s, Uganda was plunged into a rogue regime resulting in the disintegration of all sectors and, eventually, a 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. With the second liberation by the National Resistance Army (NRA) in the mid 1980s, the country has made commendable efforts to rebuild its sectors to the past strengths. Thus, the Forest Department was revived and provided with substantial support, particularly by external development partners.

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 with a changed general strategy for service delivery. This first abrupt and haphazard decentralisation soon resulted in certain undesirable outcomes, which necessitated its immediate review that resulted in its withdrawal in 1995.

After retracting its 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 structure 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 the lower level 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, between 1999 and 2002 Uganda succeeded in introducing a forward-looking forest policy, forest legislation and a national forest plan which resulted in, among other things, the establishment of a parastatal organisation – the National Forest Authority (NFA) - in 2004. NFA is operating with clear responsibility for managing the nine forest conservation areas in the country. However, there remains important policy issues to be resolved with regard to (i) policy oversight for NFA and (ii) functional links between NFA and local government extension services.

Tanzania. Since independence in 1961, Tanzania has introduced some major changes in overall development strategies which also have shaped forest policy. These included the Arusha Declaration of 1967, which set the country on a socialist oriented development path, the decentralisation

of government administration policy of 1972, the villagisation programme of 1967 to 1976, and the economic recovery programme (ERP) of 1986.

In keeping with the provisions of the Arusha Declaration, which aimed at building a socialist state in Tanzania, forests became nationalised. However, the main management problem of forests in Tanzania during the thirty years following the declaration was the large area which is under public lands and where virtually no management activities undertaken, although the central government in theory is responsible for its management. The areas designated as forest reserves, which are also under the government, suffered from poor management because of limited manpower and other resources. During the mid 1980s, economic reforms were initiated and the economy was liberalised, practically doing away with socialist economic policies.

Liberalisation in the forest sector includes joint management of forests between the government and communities and other decentralisation initiatives, as a way of making management of natural resources sustainable. A new forest policy has been formulated to cover these new management approaches.

Tanzania developed its Forestry Master Plan in 1990/91 but it was not implemented. From 1994, the Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism embarked on nfp development including policy and legislation reviews. This culminated in the adoption of a new forest policy in 1998 and a new Forest Act in 1999.

Tanzania's nfp is still operating with a coordination unit (CU) and steering committee (SC) housed within FBD. These structures are well positioned within the forest authority to give access to high level decision-makers within and beyond the sector. The internal ownership is strong within FBD and they have been very involved in the formulation on all aspects. However, the "donor syndrome" has influenced policy positions on key areas of forestry such as privatisation of plantations and the establishment of an executive agency (Forestry Commission).

Zambia. Forest policy and legislation are driven by the Forest Department of the Ministry of Tourism, Environment and Natural Resources. Previous attempts to run a parastatal organisation – the Zambia Forestry and Forest Industries Corporation (ZAFFICO), in 1982, to replace the then Plantation Division of Zambia Forest Department, has had limited success but still remain in operation.

In the early 1990s, Zambia developed its Forestry Master Plan but this was not implemented. With support from Finland, Zambia started its nfp development in 1995, including policy and legislation reviews, which culminated in the Zambia Forest Action Plan (ZFAP) of 1997. Zambia adopted a new forest policy in 1998 which was in congruence with ZFAP. The country also promulgated a new Forest Act in 1999. According to the 1998 forest policy, a Forestry Commission was to be established but no action has yet (in 2010) been taken towards that end. More recently, a revised forest policy was drafted in 2009.

Thus, Zambia has attempted to restructure its PFA into a semi-autonomous organisation twice. However, there seems to be strong resistance to the two attempts. Joint forest management is the main thrust of Zambia's nfp and policy development.

Mozambique. The National Directorate of Land and Forests (NDLF) of the Ministry of Agriculture is responsible for forest policy and legislation development. NDLF has taken full cognizance of the 1997 Land Law and the state decentralisation reform which are being implemented. According to these law and reforms, local government and community structures need to have clearly defined powers, responsibilities and institutional context within which to function.

Mozambique has promulgated a new Forestry and Wildlife Law of 1999 (10/99) and the associated Regulations of 2002 (12/02). This law has great potential to precipitate radical changes in the forest sector. For example, the introduction and establishment of private concessions is one of the few tangible results of the 10/99 Law that has an everyday impact on the life of the forest adjacent populations. While other legal provisions aimed at benefiting communities are yet to be put into practice, the granting and management of concession areas is now an important element of the development of the forestry sector and one which can already be examined from the point of view of the actual success of legal implementation and the security of legally provided community rights and benefits.

The main rights and benefits of the forest dependent communities envisaged under Law 10/99 are the following: subsistence level use of the resources; participation in co-management; community consultation and approval prior to allocation of exploitation rights to third parties; development benefits derived from exploitation under a concession regime; return of earmarked 20% of forestry tax revenue to the communities; and 50% of the value of fines received by an individual contributing to law enforcement.

2.1.8 Regional highlights

SADC countries adopted the **SADC Forestry Protocol** in 2002 elaborating a common framework for forest policy and actions by member states. The protocol remains a useful sub-regional instrument which has been highlighted in UNFF negotiations. However, from recent surveys in the sub-region, the protocol has become rather dormant and there is urgent need to revitalise its adoption and compliance in member states.

The Treaty for Establishment of the East African Community (Burundi, Kenya, Rwanda, Uganda and Tanzania) was signed in 1999 and entered into force in July 2000. EAC countries subsequently established a Customs Union in 2005 with plans to form a Common Market in 2010, a Monetary Union in 2012 and thereafter a Political Federation of East African States. Article 111 of the EAC Treaty calls on the member states to manage natural resources in ways which do not jeopardize the interests of neighbouring states. Accordingly, EAC has developed a **Protocol for Environment and Natural Resources Management** shared by member states. Furthermore, EAC has, in 2005, established official guidelines for strategic environmental assessment (SEA) of trans-boundary ecosystems.

The Inter-Governmental Authority on Development (IGAD), which covers Eastern Africa countries together with those of the Horn of Africa, has elaborated a strategy for sustainable management of natural resources and mechanisms for conflict resolution over trans-boundary resources.

Thus, there are trans-boundary forest issues addressed in SADC, EAC and IGAD protocols and agreements which have yet to be fully adopted in individual country forest policies and legislation.

2.2 Swedish forest policy and legislation

The facts that wood and forests acquired a commercial value in Sweden already in the latter part of the 19th century and that the forests were predominantly privately owned were necessary but not sufficient conditions for the successful development of SFM in Sweden. In addition, as forestry and forest industry became important, there was a need for policies, laws and regulations which supported the private owners in their efforts but also ensured that public and national economic and other interests were not jeopardised.

Thus, the increasing value of forests and wood triggered discussions about the need for policy and legislation. With the Swedish tradition of consensus politics and with strong groups of actors, e.g. farmers and industry, all represented in the Parliament, it took a long time before there was agreement on the first Forestry Act (FA). It was kept simple and the main concern was to prevent a further degradation of the forest resources. Subsequent FAs have also been agreed on as a result of drawn out discussions before consensus has been reached between involved parties – these parties have become more (apart from forest owners and industry, later also political parties, labour unions and, more recently, environmental groups) as the years have passed and the major concerns addressed have changed. A very brief summary:

- The first FA of 1903 simply stated that if you cut forests you must ensure that there is new forest coming in its place (by planting or managed natural regeneration). It was in response to the heavy over-harvesting of timber for the sawmill industry in the latter part of the 19th century.
- The second FA of 1923 stated that "all land without other productive use should be used for forestry", and that forest owners must care for young forests (the first FA had not lead to improved forests, since selective cutting of timber had continued without care for what was left).

- The third FA of 1948 put value adding in forestry in focus all forest management activities should be determined by the economies of the activities (e.g. when forest growth slowed down and no longer added value, the stand should be clear-felled).
- The fourth FA of 1979 was passed against the background fear of a major future deficit in wood for industry and it consequently emphasised maximum production through compulsory growth enhancing management, including subsidies for certain measures.
- The fifth FA of 1994 half reversed the policy of the previous FA; environmental groups had become strong and successfully demanded that environmental aspects (e.g. protecting biodiversity) should be as important as the productivity goal.

The Forest Act was partly amended in 2008 and 2009, with an emphasis on production enhancing measures (albeit with a continued dual goal of production and conservation). Thus, Swedish forest policies have continuously evolved and been revised in response to emerging issues and concerns, often in drawn out processes involving different stakeholders and political interests, and supported by expertise from government, forest owners, industry and NGOs. Although consensus have normally been reached, there has been very "hot" and acrimonious disagreements along the road – e.g. between farmers and industry in the late 1800s, between socialist politicians (and unions) and forest owners and industry in 1950-1980, and between production forestry (owners, industry *and* unions) and urban environmentalists in the last 30 years. Independent platforms, such as the Royal Swedish Academy of Agriculture and Forestry (KSLA), have played important roles in finding positions around which consensus have eventually been formed.

Finally, and in order to understand the Swedish public's relation to forests, it is essential to point at the unwritten, *customary law of right of public access to all forest land*, i.e. also to privately owned forests. The collection of mushrooms, berries, and some ornamental plants (mainly annual flowers, mosses and lichens) is a very popular pass-time among Swedes. You are not, however, allowed to cut living trees or even branches from them. Although the commercial value of picking non-wood resources is difficult to estimate (because the collected items are predominantly used for people's own consumption), it is significant. In addition, it contributes to people's health and to their engagement in the forest policy dialogue, often via various NGOs.

Some important lessons learnt are:

- A good forest policy and law should be kept as simple as possible and concentrate on the key issues only, rather than try to address all details concerning forest activities. It must keep a good balance between positively supporting the forest owners, users and industry on the one hand and maintain the interests of society at large on the other. Neither "top-down" approaches nor influences from outside interests have worked in Swedish forest policy formulation.
- Although there are cases, particularly in recent years, where short-term political and opportunistic considerations have been allowed to influence them, Swedish forest policies have normally taken *a long-term perspective* and been *under-pinned by very thorough facts and statistics* about the conditions and trends in the forest resources and the economies of forest operations and industry.
- The main lesson learnt about the many roles of the Government facilitator of policy discussions, enacting laws and ensuring their enforcement, and provider of extension, research and training is that the more *objective and professional the Government acts* as a supporter of the forest sector, the more will the sector thrive. Top-down approaches with biased perspectives in favour of only one or a few stakeholders (be it industry, labour unions, forest owners, farmers, environmentalists or the general public) will rarely lead to a consensus that is accepted by all.
- The development of SFM in Sweden has taken a long time and it still keeps on evolving. Policies and priorities have changed and mistakes have been made and corrected over the years. Outside societal processes as well as "internal" forestry developments (e.g. technology changes and economic situations) have influenced the way forests are managed. More recently, international (UNFCCC, CBD, WTO, UNFF, ITTO, etc.) and regional (EU) processes have had an impact on policy discussions. The lesson is that it would have been impossible to go from a situation of deforestation and forest destruction to "perfect" SFM based on hundreds of criteria and indicators (C&I) overnight.

2.3 Suggested areas for cooperation

In the course of the consultations and analyses done in the context of developing this report, we initially identified three possible priority areas for cooperation in the wide field of policy relevant issues between partners in Eastern and/or Southern Africa on the one hand and Swedish and other external partners on the other. When these were presented and discussed at the workshops in Nairobi and Lusaka in April 2010, participants identified one further policy-related priority area that was felt suitable for possible collaborative efforts.

Naturally, there are an almost unlimited number of urgent activities suitable for various forms of collaboration on issues related to policy, institutions and legislation, and we may well identify others in the continued work. On the other hand, the purpose of the programme is not to identify *every* possible opportunity for collaboration that can be thought of, but rather a very carefully select number that may realistically be further developed and attract the necessary technical and financial support and partnerships to make them feasible to implement.

Thus, in very brief summary, the four areas are described below. The full project proposal concept notes developed around them are found in *Appendix 3*.

1. Analyses of regional/trans-boundary forest issues.

A number of major issues of a trans-boundary and regional nature, where forests and forest policies and legislation, or the lack of them, have significant roles to play, have come into prominence in recent decades. They include:

- forest-climate interactions (including the REDD discussions);
- biodiversity conservation (transboundary national parks and conservation areas), desertification;
- how to reduce illegal international trade (including the FLEGT process);
- role of forests in cross-boundary hydrological conditions (cf. the many "watershed" and "river basin" based programmes);
- competition for land for different uses food, fibre, fuel (the 3Fs);
- issues related to spread of fires;
- > movement of and regional collaboration on tree seed and germplasm.

The general trend has been for countries to become party to agreements, with good intentions, and then fail in implement required follow-up country actions largely due to lack of technical capacity. On the other hand, there is considerable experience of international and regional forest policy dialogue and issues in many Swedish institutions and some of this may be possible to take advantage of in building up the capacity in Africa. This proposal aims at assisting in building up sufficient capacity at regional and national levels to monitor and analyse implications, problems and opportunities associated with regional and cross-country forest issues.

2. Strengthening capacities to implement nfp-driven plans

Many countries are in the process of, or have recently completed, reviewing the way in which they plan, implement and monitor activities in the forestry sector. Many of these review processes have been undertaken with support from the National Forest Programme (NFP) Facility and FAO. Several countries in eastern and southern Africa, including five of the six countries under this study (all except Ethiopia), have benefited from this support. From the current review of implementation of nfp-driven plans it is, however, clear that countries are making very slow progress. For most countries, the key limitations lie in achieving policy, legislation and institutional reforms which are necessary to implement nfp-driven plans. Specifically, there is need for sustained capacity building in policy and legislation reviews and in national forest programmes planning. In view of the similarity of the different national nfp processes, and their problems, needs and opportunities in the E and S African regions, it is not unrealistic to take a regional approach.

Thus, the proposal aims at undertaking an in-depth study on the implementation of nfps in eastern and southern Africa and, based on the analysis, design and test strategies and activities for strengthening and improving the implementation and monitoring of national forest programmes in the region.

3. Analyses of land/tree tenure issues as constraints and opportunities in achieving SFM

The complex issue of land and resources tenure continues to have a profound influence on the development potentials and options in agriculture, forestry and livestock management in Africa. Old, traditional land and resource tenure and use systems are in place in many parts of Africa. As a combined result of the often uncertain or insecure land tenure situation, and the fact that there are very limited, if any, possibilities to take loans using the land itself as collateral, there is often a reluctance or inability to make major investments in land improvement. Naturally, this difficulty is even more pronounced when it comes to invest in long-term undertakings such as tree growing. The problems of finding capital for investment in land and trees are shared by farmers, communities and private, commercial investors alike.

This proposal aims at making an in-depth analysis of how different land and tree tenure conditions in E & S Africa affect the potential of making tree growing and forest management contribute to economic development and environmental improvement, and, based on this, suggest and design ways forward to handle and/or suggest how to change situations that pose serious hindrances to sustainable forest use and management.

4. Wood as a source of energy – potentials and implications on policies and legislation

The enormous importance of wood as a domestic energy source in Africa and of charcoal as a commercial, albeit often "informal" or illegal, commodity, in many African countries is well known. Quantifications of firewood use started in the 1970s on a large scale, and, more recently, the commercial value in charcoal production and sales have been highlighted in several studies (see Introduction, p. 7). Today there is a rapidly increasing interest in biofuels – from woody biomass in the form of combustible gases or liquids – and the land areas required for large scale commercial production of this will compete with land for food and pulp/timber production.

Normally, the use of wood as fuel, particularly firewood and charcoal, is normally seen as a problem, allegedly causing deforestation and loss of biodiversity, and efforts have mainly concentrated on reducing its use, e.g. through legislation making it illegal to trade in charcoal or construction of more economic wood-stoves. However, it is more constructive to look upon wood fuel as an enormous economic potential for rural people, and efforts ought to be concentrating on producing fuelwood and charcoal in sustainable ways.

Thus, the aim of this proposal is to analyse the technical and economic potential of enhanced use of wood as a source of domestic and commercial energy in E and S Africa, and to identify the policy and technical interventions required to achieve this potential.

3. Strengthening Africa's technical, research and institutional capacity to support SFM

3.1 Current status of mechanisms, facilities and institutions supporting SFM in eastern and southern Africa

This report is based on information collected from six countries, viz. Tanzania, Uganda, Kenya, Ethiopia, Mozambique, and Zambia. This section covers research on forests and trees, education and training institutions and programmes, extension services, inventories of forest and tree resources, marketing of wood and NWFP and phyto-sanitary services.

3.1.1 Research on forest and tree resources – institutions, resources, relevance

In most of the countries, forest activities are guided by national forest policies, for example of 1998 in Tanzania (*URT*, 1998) and Zambia, of 2001 in Uganda (*RU*, 2001), the forest acts of 2002 in Tanzania (*URT*, 2002), of 1999 in Zambia, of 2003 in Uganda, of 2005 in Kenya, and by National Forest Programmes. The policies emphasise demand driven research and in some countries, for example in Tanzania, to be in line with the National Forest Research Master Plan and to be integrated in the National Forest Programme (*URT*, 2001). Collaboration, close linkages, regional and international cooperation are also strongly emphasised by the policies.

Due to the importance of forests and trees to the economy and environment, there is, in all countries a desire to improve forest management and productivity, preserve biodiversity, maintain ecological integrity, and provide social services, such as recreation and tourism. This necessitates and requires a strong forestry-research base to guide decisions. Forest research in the region is largely undertaken by Forest Research Institutes and Universities providing forestry education (Table 3.1).

Country	Research Institute	Universities
Ethiopia	Forestry Research Process, EIAR	Wondo Genet College, Hawassa University
Kenya	Kenya Forest Research Institute (KEFRI)	Moi University Kenyatta University
Mozambique	Forest Research Centre, Directorate of Agriculture and Natural Resources	Eduardo Mondlane University
Tanzania	Tanzania Forest Research Institute	Sokoine University of Agriculture (SUA)
Uganda	National Forest Resources Research Institute	Makerere University
Zambia	Zambia Forest Research Institute, Kitwe	Copperbelt University

Table 3.1: Forest research Institutes and Universities providing forestry education

- -

3.1.1.1 Forest Research Institutes

Given the potential contribution of research to sustainable forest management, it is important to review the current situation with regard to research scientists, facilities and constraints of forestry research institutions in the region (Table 3.2). All institutions under review are public.

Table 3.2: Researchers	facilities and	constraints of	forest research	institutes
Table J.Z. Researchers	, racincies and	constraints of	ionest research	monuco

Forest Research	Resources		Constraints
Institute	Researchers	Facilities	
Ethiopian Forest Research Process	 8 PhD 26 MSc 12 BSc Total 46 	 Offices 5 labs (seed, wood technology, tree ring, chemistry, protection Vehicles 	 Trained researchers Laboratory equipment Financial (budget) Vehicles Organisation structure, low

		Field experimental sites	political profile
Kenya Forest Research Institute (KEFRI)	 87 Postgraduate scientists 100 foresters and technologists Total 187 	 Modern offices Modern research/training facilities 6 Regional centres 4 sub-centres 6 field stations 	 Low funding Publication and dissemination of research findings Inadequate capacity to meet increasing demand for tree seed Low corporate profile Weak management in regional centres Low revenue generation Weak in development and deployment of products
Forest Research Centre, Directorate of Agriculture and Natural Resources, Mozambique	• About 12 Forest Engineers (3 MSc students)	Weak facilities	 Funding inadequate Few researchers Limited facilities, including reference library Organisational structure Publications
Tanzania Forest Research Institute (TAFORI)	 PhD 1 MSc 15 BSc 18 Total 34 	Headquarters under construction8 research centres	 Few researchers, seniors approaching retirement Low funding Shortage of Botanists, inventory staff Lack of technical backup
National Forest Resources Research Institute, Uganda	 3 PhDs 12 MSc (3 PhD students) 7 BSc Total 22 	New HeadquarterLaboratories2 Green houses	 Inadequate funding (World Bank funding ended) Shortage of lab equipment Few researchers
Zambia Forest Research Institute, Kitwe	 9 researchers (9 positions vacant) 	 Very old equipment Seed laboratory 	 Understaffed; transfer of staff to provinces Low funding No research Master Plan, researchers setting own priorities Organisational structure Not publishing (last Research Note 10 years ago)

The distribution and the qualifications of research scientists vary across institutes. For example, on the one hand, KEFRI having almost an optimum number of researchers with postgraduate qualifications, and on the other hand Zambia Forest Research Institute being extremely understaffed. In institutes such as TAFORI, the current human resources status will continue to be eroded as senior and more experienced scientists retire and a few remaining are assigned to administrative functions. Forestry activities, including research, are not considered to be top priority in some countries where forestry is under the ministry responsible for agriculture.

Generally, the challenges facing these institutions are many and also vary, but just to mention a few:

- Low funding, in most cases only enough to pay salaries.
- Few researchers, countries are relatively big and diverse. It is not only the numbers, but the composition of different disciplines.
- Lack or shortage of research laboratories and equipment.
- Aging senior staff, most of them retiring in less than 5 years without adequate preparations for their replacement. Unfortunately, most of the retired senior forest officers are physically active, knowledgeable and skilful, but are currently not seriously engaged in forestry or related activities.
- Organisational structures, for example the case of Ethiopia where forestry is marginalised under the Department of Watershed in the Ministry of Agriculture and Rural Development.
- Inadequate publications, for example in Zambia the last Research Note was produced 10 years ago.
- Poor staff retention, due to low salaries and poor facilities, making forest research unattractive. For example in Ethiopia, 5 senior research scientists left the institution in the period of 5 months (July to December, 2009).

• Weak research collaboration within individual countries, in the region and with international organisations and NGOs.

The above listed challenges must be addressed to facilitate research institutes to generate appropriate technologies for sustainable forest management.

3.1.1.2 Forest Research Programmes

Table 3.3 summarises the for research institutes in the region.

Table 3.3: Current research programmes

Forest Research Institute	Current Research programmes
Ethiopian Forest Research Process	 Plantation and farm forestry programme Rehabilitation of degraded land research project Agroforestry research project Industrial plantation research Natural Forest programme Bonga natural forest sustainable management research project Non Timber Forest Products programme Bamboo research project Natural gum and incense research project Socioeconomic research on Gum, Incense and Bamboo project Bio-energy research project Forest Products utilisation case team Selected tree species utilisation research project
Kenya Forest Research Institute	 Farm forestry programme Natural forests programme Dry lands forestry programme Industrial forest plantation programme Technology dissemination and service programme Tree seed programme Partnership and networks programme
Forest Research Centre, Directorate of Agriculture and Natural Resources, Mozambique	 Agroforestry Social economics
Tanzania Forest Research Institute, Tanzania	 Management of Natural Forests (four ecological systems: montane forests, the miombo woodlands, mangroves and riverine forests) Community and Farm forests Plantation forestry and tree improvement Forest Resource Assessment Forest operation and utilisation Social economics, policy and forest extension
National Forest Resources Research Institute, Uganda	 Farm Forestry Natural Forestry Plantation Forestry Forest Products and services Integrated pest, diseases and fire management Socio-economic, gender and human concerns Information and communication management
Zambia Forest Research Institute, Kitwe	 Domestication of rubber tree Tree improvement, clonal seed orchards, vegetative propagation Biogas from wood Utilisation of sawdust Lesser known species

While the current research programmes listed above are still relevant, the topics are basically traditional, failing to capture recent emerging issues such as climate change, bio-fuel, biodiversity, governance, value addition for forest products, scientific validation of indigenous knowledge, cross boundary trade, impacts of oil and mineral exploration and exploitation, etc. Although emerging issues are not captured in the current research programmes, facts are nevertheless required for
guiding and making rational decisions. The need for research institutes to review their programmes in order to capture emerging issues is undoubtedly obvious.

3.1.2 Education and training institutions and programmes – quality and numbers of forest personnel

The training institutions are expected to provide a level of instruction necessary to develop a core competence, producing suitably trained graduates who have an adequate knowledge base, are socially aware, and technically skilled to serve as researchers, tutors, managers, technicians, etc. Professional forestry training is provided by Universities, and technical training by Forest Colleges.

3.1.2.1 Universities providing forestry education

Seven Universities in the region were surveyed to record academic staff and their qualifications, facilities and current programmes. The summary of available academic university personnel numbers, facilities and programmes related to forestry are given in Table 3.4.

Table 3.4: Universitie	s providing	forestry	education	in the	e region
------------------------	-------------	----------	-----------	--------	----------

University	Re	sources	Programmes
	Academic staff	Facilities	
Wondo Genet College of Forestry and Natural Resources, Hawassa University, Ethiopia	PhD 16 MSc 23 BSc 17 Total 59 (14 PhD students and 22 MSc students)	 Classrooms Laboratories (Soil, Wood, GIS) Computer centre Library Arboretum Nursery Sawmill and charcoaling Natural forest Plantation forest Camping sites Agroforestry demonstration site 	 Faculty of Forestry BSc Forest management and utilisation BSc General Forestry BSc Agroforestry Faculty of Natural resources BSc Natural resources BSc Natural resources Management BSc Soil Resource and Watershed Management BSc Soil Resource and Watershed Management MSc Production Forestry Agroforestry Soil and Watershed Management Continuing Education Programmes The CEP (weekend and summer) provides two programmes: degree (for upgrading diploma graduates) and special diploma. PhD programme is planned in collaboration with other Universities (SLU Uppsala, Oregon, Bangor, Helsinki)
School of Natural Resources Management, Moi University Kenya	PhD 24 MSc 17 BSc 2 Total 53	 Classrooms Offices Library 	 Department of Forestry & Wood Science BSc (Forestry) BSc (Wood Science & Industrial processes) BSc (Agroforestry and Rural Development) M.Phil (Forestry) M.Phil (Wood Science) Ph.D (Forestry) Department of Wildlife Management) BSc (Wildlife Management) M.Phil (Wildlife Management) Diploma (Tourism & Wildlife Management) Department Fisheries & Aquatic Sciences BSc. (Fisheries & Aquatic

			Sciences) - M.Phil (Fisheries Management) - M.Phil (Aquaculture) - Ph.D (Fisheries) - Diploma (Fisheries Management) • All BSc degrees are 4 year programmes • MSc programmes M.Phil will change to MSc for all the University • Provide short courses on request
Department of Environmental Science, School of Environmental Studies, Kenyatta University, Kenya	PhD 17 MSc 8, are on PhD studies Total 25	 Laboratory (chemical and biological) Computer lab Internet Etc 	 BSc Environmental Science Bachelor of Environmental studies and Conservation MSc Environmental Sciences MSc Agroforestry and Environmen- tal Education Certificate in Environmental Impact Assessment, Auditing and Monitoring
Department of Forestry, Eduardo Mondlane Univer- sity, Mozambique	25 staff	 Laboratories Classrooms Library Etc 	 BSc Forestry (4 years) MSc Forestry Short Courses (on request)
Faculty of Forestry and Nature Conser- vation, Sokoine University of Agriculture (SUA), Tanzania	PhD 34 MSc 16 BSc 9 Total 59 (of which 6 female)	 2 Field stations 3 Training Facilities/ Training forests Training sawmills, Carpentry workshop, Timber preservation unit, Wood Science lab, Zoology lab, Forest engineering workshop Computer room 	 BSc Forestry Wildlife Management Tourism Management MSc. Forestry Management of Natural Resources for Sustainable Agriculture (MNRSA) Wildlife management PhD
Faculty of Forestry and Nature Conser- vation, Makerere University, Uganda	Total 68 academic staff	 4 departments Canteen Computer lab Conference facilities Library 	 BSc -Forestry -Wood science -Community Forestry -Plan for Commercial Forestry MSc -Forestry -Agroforestry PhD -Forestry -Agroforestry
School of Natural Resources, Copperbelt University Zambia	PhD 6 MSc 18 Total 24	2 Departments	 BSc Forestry Agroforestry Wood Science and technology Fisheries and Aquaculture Wildlife management Wish to start postgraduates programme

There is a general consensus that institutions for tertiary education in forestry are currently facing a lot of challenges and therefore are not capable of adequately delivering needed services. Stakeholders were of the opinion that the main challenges include:

- Inadequate funds to maintain laboratories, procure chemicals and reference material, replace old and degraded equipment, etc.
- Need to strengthen practical training in the current BSc Forestry programmes in all Universities surveyed. Graduates do not have adequate hands-on skills necessary for practical field activities currently demanded.
- Interest in forestry by students is going down. Forestry considered dirty, manual, therefore a lot of inter-school and inter-faculty transfer in the first 2 weeks to other programmes. Also

Graduates in Forestry going for Masters leading to white collar job (Business Administration, etc).

- Aging professors.
- Inadequate capacity to address emerging issues such as Climate Change, Certification of forests and forest products, Biodiversity, Governance, Carbon credit assessment, Cross- border ecosystem, commercial forestry, value addition, certification of forests and forest products, etc.
- Inadequate training for Botanists, inventory staff, seed technologists, plantation forestry.
- Inadequate provision of extension skills required for working with farmers, and necessary for NGO activities.
- Staff motivation and improvement of working condition. A big turn-over of staff to "greener pastures".
- Expensive Postgraduate studies are not affordable by Privately Sponsored Students (PSS) therefore need for scholarships particularly to support best students.
- Difficult to recruit staff for some subjects, e.g. Forest Engineering, Genetics, Wood Science, etc
- Old curriculum requiring revision.
- Mushrooming of new Universities (including those providing forest education), thus spreading thinly the few qualified staff. Therefore, old and well established Universities are challenged to expand and strengthen their postgraduate training programmes so as to produce quality and quantity of new and future academic staff.

The overall regional capacity is low (i.e. one institute/country may be strong in one area, but weak in another). There is a need therefore to strengthen collaboration between institutions within individual countries, regionally and internationally. Overall, collaboration must be scaled up to produce a combined impact for building forest capacity in Africa. Additionally, strengthening existing networks, e.g. AFF, ANAFE, AFORNET, IUCEA, etc., and expanding collaboration with international organisations (e.g. ICRAF, CIFOR, WWF, just to mention a few), which are already working in the region will positively contribute to improving the present status.

The responsibilities of the foresters have changed over time, making the traditional curricula that put much emphasis on conservation inadequate, hence urgently dictating curricula development for new degree programmes, but also revision of existing programmes and strengthening of practical training to impart skills. Staff recruitment, refresher courses for academic staff on emerging issues, training of technicians to use modern equipment will be some of the activities for the way forward.

Institutions in Mozambique are constrained by language. Most of the textbooks, journal articles and other literature available in Mozambique and those that can be obtained in the region are mainly in English, some in French and very few in Portuguese. On the other hand, the Portuguese speaking Mozambique is surrounded by English speaking neighbours, and therefore, training programmes offered in these countries are also offered in English. Other Portuguese speaking countries in Africa (Angola, Guinea Bissau, Cape Verde) do not seem to have much to offer to Mozambique on forestry. However, since most of the staff in Mozambique has had some English language during their formal training, it is recommended that networking, collaboration with other institutions, and participation of Mozambique in joint research activities is desirable.

3.1.2.2 Forest colleges

Technical forest training at Certificate and Diploma levels is provided by forest colleges. All forest colleges in the countries surveyed are also public, accredited by national qualification systems (such as the National Council for Technical Education, NACTE in Tanzania; Technical, Vocational and Entrepreneurship Training Authority TEVETA in Zambia, etc.) and normally have strong cooperation with national higher learning institutions. Information for selected forest colleges is provided in Table 3.5.

College	Resources		Programmes
	Tutors	Facilities	
Kenya Forest College, Londiani	Ph.D. 1 (Principal) BSc 13 Diploma 8	 Training forest Carpentry and joinery equipment Office equipment and 	 Diploma (one year) Certificate (two years) Paramilitary training in forest protecttion (forest ranger for KFS, local

Table 3.5: 1	Information	on selected	forest colleges
--------------	-------------	-------------	-----------------

	4 BSc students Total 25	space	authorities and community forest scouts for PFM)Artisan courses in Carpentry, joinery and saw milling
Forestry Training Institute, Olmotonyi Tanzania	MSc 22 BSc 4 Diploma 1 Total 27 (1 PhD student and 4 MSc students)	 Training forest Small-scale circular sawmill Nurseries, agroforestry demonstration plot Laboratories, computer lab. Library 	 Long course Technical Certificate in Forestry and Beekeeping Ordinary Diploma in Forestry and Beekeeping Short course These are based on Clients' requests (tailor-made courses), the duration of which ranges from 2 weeks to 3 months. Outreach programmes The Institute offer outreach services to communities in different ecological zones
Nyabyeya Forestry College, Masindi, Uganda	1 PhD (Principal) MSc 7 BSc 7 Diploma 10 Certificate 7 Total 32	 Lecture rooms Student hostels Staff houses Offices New Library Computer lab located in Budongo Forest 400 ha (Land for Plantation forest) 130 ha (natural high forest) Agroforestry demonstra- tion plots 	 Diploma in Forestry (2 years preservice and 1 year in service) Diploma in Agroforestry (2 years) Diploma in Biomass Technologies (2 years) Diploma in Beekeeping (2 years) Certificate (in Forestry, Beekeeping, Carpentry & Wood technology) two years Short courses, 1 to 4 weeks (in Energy conservation, Carpentry & Wood Technology, Agroforestry, Tree nursery management, Landscaping etc)
Zambia Forestry College, Mwekera	MSc 1 BSc/BA 7 Diploma 13 Total 21	 100 ha of plantation, woodland (48 ha), and 31 ha for fire studies Office space Dormitories for 148 students Limited staff housing Timber graveyards, Beehives established 	 Certificate in forestry (2 years, 70% field training) Diploma in Forestry (3 years, certificate holder takes 1 less, 40% field training) Rangers training (90% field training)

Forest colleges are also facing a lot of challenges, most of them being similar to those facing tertiary institutions. These include low funding and investments, low salaries and low motivation of staff, poor internet connectivity, need to conduct short and refresher courses for tutors, poor infrastructure due to lack of maintenance, few and old teaching materials, shortage of equipment and tools for field practical, shortage of accommodation for female students (e.g. at Nyabyeya College), and organisational constraints mainly for colleges operating directly under departments of forestry or agriculture in ministries (i.e. without College Boards).

The idea of establishing or strengthening cooperation among forest colleges in the region in order to facilitate exchange of staff, sharing of experiences, exchange of teaching materials and joint curricula reviews was proposed by many interviewed.

3.1.3 Extension services and provision of information to tree growers, forest communities, small-scale wood and NWFP based industries, etc.

The purpose of extension work is to serve as a link between research and farmers, to awaken their desire for technical, economic and social change and to teach farmers best practices and managerial skills.

Forest extension is affected by, and must respond to, changes within and outside the forest sector such as changes in policies, objectives and conditions of forest management, globalisation, and decentralisation, among others. Forest extension is very important for supporting sustainable forest management, and must respond adequately to recent challenges of environmental conservation, climate change, biodiversity and many others. Forests cannot be protected and conserved unless extension providers can demonstrate to local people that they can make a reasonable livelihood from forests. (*Agbogidi and Ofuoku*, 2009).

For forest extension to remain relevant, it should engage beyond tree propagation, plantation establishment, management and harvesting, and focus its energies also in assisting communities and private tree growers in a diverse range of situations, towards optimising their management decisions in multi-functional forestry. Private, government and NGO forest extension staff should be prepared to continually upgrade their skills to be able to provide advice on a wide range of parameters, including environmental, social, economic and sometimes legal ones.

Extension programmes are known to succeed when linked to research and other players, recognising the interlocking nature with several factors, and approaching rural development through a package of programmes necessary for supporting communities towards improving their livelihoods. It is known that national extension services do not contribute much in isolation because technical information without other facilities and inputs cannot assist adequately. In some cases it is for that reason that forest-related research institutions have frequently expressed their frustration at the low impact of their research and expressed the need for improved technology transfer.

In the region, the provision of forest extension services to communities and tree growers varies across countries. In Tanzania, Forest Extension and Participatory Forest Management are combined under the Central Government and the country is organised into seven zones, viz. the Southern, Southern Highlands, Eastern, Central, Northern, Western and Lake zones. Each zone employs at least eight people who work very closely with Regional and District forestry officers.

In Uganda, forest extension services are decentralised to Districts. The District Forest Services Department (of the Central Government) have the responsibility of mobilising resources for all Districts (about 80 of them). However, so far there is limited support from the Central Government to Districts.

In Ethiopia, the Forest Research Centre is mandated to carry research and generate technology, but extension is done by the Ministry of Agriculture and Rural Development, and the link between forest research and extension is weak. In the MoA&RD, forestry is just a section, under the Watershed Department. Therefore all forestry activities, including extension, are marginalised. Many people interviewed were of the view that Ethiopia has a good forest policy, but there is no strong institution or mechanism for its implementation.

In Mozambique, the regional centres of the Forest Research Centre, under the Directorate of Agriculture and Natural Resources, are expected to work with District Agricultural Extension Officers.

Zambia is organised into nine Provinces (Copperbelt, Central, Lusaka, Southern, Western, North-Western, Eastern, Luapula and Northern) each with a Provincial Forest Officer and 72 Districts, each with a District Forest Officer. The mandate of provinces and districts initially included mainly forest protection and forest management, and collection of tax for government through sale of forest produce. From 1997/1998 their mandate was expanded to also include forest extension, embarking on plantation establishment, controlling fires to allow miombo woodlands to regenerate after exploitation. Unfortunately, restructuring removed all forest guards, most of them experienced and skilled, and vacant positions are yet to be filled.

The Kenya Forest Service (KFS), which is a state corporation, was established in February 2007 under the Forest Act of 2005 to provide for the establishment, development and sustainable management, including conservation and rational utilisation, of forest resources for the socialeconomic development of the country. It is also responsible for forest extension. KFS has an extension programme operating on farm lands and medium potential areas and in the communal lands. The main objective is to support and facilitate farmers to raise trees and forest products in their farms in order to ease pressure on gazetted forests and also manage the woodland forestry resources. The main activities includes provision of extension services countrywide, promotion of farm forestry, promotion of dry land forestry, capacity building for all stakeholders, awareness creation on tree planting and forest conservation, creation of linkages between producers of forest products with market and research information on best practices, production and dissemination of technical information on farm and dry land forestry. Out of 248 Districts in Kenya, KFS operates in only 71 (the increase in number of Districts is very recent and few government services have filled positions in the new Districts). At the time of visiting (September, 2009) few members of staff were employees of KFS, most were on "forced" secondment from the Ministry, therefore not motivated.

Overall, most stakeholders were of the opinion that forest extension in the region is:

- Weak and fragmented,
- Operating with limited funding (governments need to develop more sustainable funding arrangements that are not entirely dependent on temporary assistance from donors),
- Has limited staff, who are also inadequately trained in extension
- Have no strong connections to research institutions, to CBOs, national NGOs and the private sector.
- Lacking mechanisms for technical training to impart new knowledge. In-service and refresher training are necessary to keep pace with technological advances and methodological developments.
- Weak or lacking mechanisms to give feedback to researchers.
- Weak or lacking linkages for dissemination of research results.
- Lacking or shortage of logistics, mainly for mobility, of extension agents

These views are not new, but are an indication that previous recommendations to rectify them were most likely not implemented.

Dissemination by forest extension services is at present mainly done through workshops for selected/focused groups, use of cinema, radio, extension leaflets, PFM activities and, in a few cases, through joint activities with NGOs. On the other hand, Universities and other training institutions disseminate through extension manuals, establishing demonstration plots in farmers fields and at schools, through Forestry Students Associations publicising forestry activities, University renting land from farmers for research activities, open days before graduations, farmer field school for students and staff to interact with farmers, exhibitions, etc.

In order to be effective, there is need to combine a number of approaches including practical demonstrations, and not simply to provide information through seminars and workshops. The relationship between forests and society, with attention to other land users must be recognised. It is equally needed to train forest extension staff not only for work in gazetted forests, but also, for example, in skills to promote agroforestry (in Ethiopia, where most farmers have small pieces of land of less than one hectare) and in commercial tree growing, including organising small outgrowers into associations (in Uganda, Mozambique and Tanzania, where big private companies such as Green Resources are involved in commercial timber production).

The lack of involvement of stakeholders in the planning and implementation of extension programmes has also been responsible for programme failures. Therefore, forest communities for whom the programmes are designed should be given opportunity to participate in the planning and implementation process. To that effect, local language abstracts and manuals may be essential to effectively engage such audiences.

Extension services are often directed to the heads of households with the assumption that once the information reaches the head, it will automatically be shared with the rest of the household, which, of course, is not always the case. One challenge in the region is how to engage the youth in forest activities.

Finally, forestry extension should not necessarily be a service provided only by governments, but some of the activities could be privatised. The main challenges for small scale industries (including wood based ones) include shortage of skilled manpower (many are self trained artisans and family affiliation may dictate selection of workers), financing, availability of raw materials, machinery and spare parts, and information. Some of the problems facing small scale industries have to do with the entrepreneurs themselves: skills are often centred on one person, the owner, instead of workers specialising in steps of production; obsolete machinery and methods of production, high costs and low quality (workmanship is irregular due to use of casual workers). In Tanzania, extension services to small scale industries are provided by SIDO (Small Industries Development Organisation) under the ministry responsible for industries. SIDO runs a "Transfer of Technology" programme linking firms in developed countries to firms in Tanzania, and help in applying for bank loans. Similar programmes are recommended elsewhere.

3.1.4 Inventories of forest and tree resources, monitoring and quantifying trends

The demand for forest and land use information has evolved from the decades-old economic point of view to a wider range of information encompassing the economic, social and environmental benefits of forest and tree resources. Many African countries are well endowed with forestry resources, but they are also among those with the most scant information about these resources. One of the conclusions of the Global Forest Resources Assessment (FRA) 2000, and later confirmed by FRA 2005, was that the forestry information in Africa is still poor and most countries have difficulties in reporting on their resources: for example, in the last two decades, only eight countries provided reports with information collected through field surveys and mapping. All other countries, including those with the greatest forest cover, such as Angola, Democratic Republic of Congo, Gabon, Sudan, and Zambia, did not provide reports based on national forest inventory processes. The scarcity of African forest information is the result of a number of factors, including:

- Lack of, or insufficient, financial and human capacity of the countries.
- Information and knowledge about their forests are often not among the countries' priorities.
- Low awareness among decision-makers about the national forest inventory process as the founda-tion for policies, planning and development.

National Forest Monitoring and Assessment (NFMA) is the process of collecting and using information about the entire forest resources in a country. NFMA also includes analysis, evaluations and scenario development for use of information, for example in policy processes and various other forms of decision-making. National forest inventory is the principal activity of data collection within NFMA (*FAO*, 2009).

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

In Africa, FAO has responded to all counties that have requested its support: Algeria and Cameroon have completed their NFMA; and Zambia has completed its national Integrated Land Use Assessment (ILUA) and is working with FAO on the planning of the Phase II of ILUA. NFMA projects are under way in Angola, Congo and Tanzania. FAO supported Uganda with the formulation of its NFMA project, but the project is not yet funded. South Africa is currently planning an ILUA project with FAO (*FAO*, 2009).

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

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

At present, not much inventory is done in Kenya and Ethiopia, therefore not much is documented or reported here. Uganda waits funding for an NFMA project, while in Tanzania the project was launched in April, 2009 and NFMA projects are completed in Zambia and Mozambique. The section below summarises the projects in Tanzania and Mozambique.

3.1.4.1 National Forestry Resources Monitoring and Assessment of Tanzania (NAFORMA)

In Tanzania, the state and trends of the forest resources are not well known. The existing information is fragmented and outdated. The data on the forestry resources at national level is mostly speculative. Reliable information on Tanzania's forest resources is mainly constrained by the lack of institutional capacity. Reliable estimates of the forest and ecosystem resources, consumption rate and real economic potential are still lacking.

Under the National Forest Programme of Tanzania, the National Forestry Resources Monitoring and Assessment (NAFORMA) component was identified as a priority activity for the Forest and Beekeeping Division (FBD). The National Forest Assessment is an efficient tool to contribute to and guide the planning and implementation and monitoring of the NFP and natural resources related programmes and projects. The results of NAFORMA are needed to support the national policy processes for the enhancement of SFM while at the same time addressing issues of REDD and GHG as international reporting obligations.

The demand by stakeholders in Tanzania for data and information on the state of the forestry resources is continuously expanding. This project was planned to develop complete and sound baseline information on the forest and tree resources, assist the FBD to set up a specialised structure and put in place a long term monitoring system of the forestry ecosystems. The inventory will eventually yield information about vegetation cover, forest resources, forest utilisation, and importance of forests and forest products for communities in Tanzania. The final inventory report will provide estimates for biomass and carbon in Tanzania forest lands. This information will save emerging demands when building up forest monitoring systems in international carbon trade schemes (*FBD*, 2007).

Experiences of Integrated Land Use Assessment (ILUA), advised by FAO and successfully implemented in several countries worldwide, were used in the process of planning (*FAO*, 2009). In addition to the ILUA approach, the NAFORMA sampling design and guidelines were modified using experience and practices adopted from other forest inventories, including Finland's National Forest Inventory (NFI), India NFI, Laos NFI, and regional forest inventories in Mozambique, Zambia, Turkey, Australia, USA and South-East Asia (*FAO*, 2010).

This project will also serve to introduce policy relevant, holistic and integrated approaches to Forest Resources Assessment (NFA) that addresses all domestic needs of information as well as the international reporting requirements. The project is part of a global effort of FAO to build local capacity, assist in monitoring/assessing the forestry resources and generating/managing information that feeds into the national policy processes (*FAO*, 2010).

The immediate objectives of the project are:

- to establish a broad consensus at the national level on the approach to NAFORMA in Tanzania;
- to strengthen capability of FBD to collect, analyse, interpret and update the needed informa-tion on forests and trees for planning and sustainable management of the forestry resources under the NAFOBEDA;
- to prepare a national map based on harmonised classification of forest and land uses and related definitions;
- to undertake a National Forestry Resource Assessment and develop national database linked to NAFOBEDA;
- to design specific and management oriented inventory in priority areas and formulate planta-tion projects.

Two complementary methods of data collection will be applied. The first is from a network of field samples distributed along a systematic grid, the second is mapping using remote sensing techniques. The field sampling is arranged in sample sites composed of clusters. Each cluster contains four plots of 5,000 m². The plots are designed to monitor the dynamics of changes of the land use systems and of the forest and tree cover in the country (*FAO*, 2010).

By the end of the NFA project, it is expected to achieve the following:

- (i) Approach and methodology for NAFORMA is designed and linked to NAFOBEDA; and capacity of FBD built and consolidated.
- (ii) Forest/land use classification system harmonised; and maps of state and changes produced based on remote sensing data.

- (iii) New baseline information encompassing a wide range of data to both local and international users generated and disseminated.
- (iv) Specific and management oriented inventory in priority areas designed and implementation projects formulated.

The project duration is three years and was launched in April 2009, with a total budget of US\$ 3.8 million (*FAO*, 2007). After the NAFORMA project, the National Forest Programme will take over the project responsibilities. The Project has about 34,000 plots of which 25% will be permanent. This is a challenge, since the current unit responsible for forest inventory has no capacity and resources to conduct monitoring in the future.

3.1.4.2Integrated Assessment of Mozambican Forests

The National Directorate of Lands and Forests, through the Integrated Agrarian Development Projects (IADP) funded by the Italian Cooperation, conducted an Integrated Assessment of Mozambican Forests (IAMF) during the period 2005 to 2007. The main objective of the IAMF was to evaluate the extent and floristic composition of the country's forest resources. It provided the Mozambican Government with an updated tool for assessing the current status of forest resources towards planning and implementing their management for present and future generations.

The project outputs included the assessments of forest resources (an updated Land Cover Map, 2004–2005, a National Forest Inventory, Manica and Maputo Provinces Forest Inventories), Special studies (Machase Area Wildlife Evaluation and Inchope Community Forest Study), other studies at national level (National Wildlife Assessment, National Non-Timber Forest Products Assessment NTFP) and, finally, the Information System (IS), which was developed to implement a strategic framework and to build and integrate data sets from different activities.

An updated Land Cover Map was produced using visual interpretation of satellite images (LANDSAT 5 TM) of the period 2004–2005. The land cover classification (FAO's Land Cover Classification System – LCCS), was adapted to the Mozambican situation. The land cover map accuracy ranged between 86% to 88% for the main land cover classes and greater than 90% for the forest classes. The map represents an updated reference on forest cover in Mozambique.

The estimates of forest and other wooded land cover areas are c. 55 million hectares (70% of the country, of which the forest cover is c. 40 million hectares or 51% of the country). Niassa Province has the largest forest area (9.4 million hectares) in the country, followed by Zambezia (5.1 million hectares). Three provinces have a forest cover above the national average, namely Niassa (77%), Cabo Delgado (61.7%) and Manica (55.5%). Maputo, Inhambane and Nampula together present the lowest forest cover in the country, about 35% of the land.

About 50% of the total forest cover of Mozambique is classified as productive forests. Conservation forest covers about 24%, and the multiple-use forest covers around 26% of the total forested area.

The forest resources assessment resulted in a National Forest Inventory (NFI) and provincial forest inventories (for Manica and Maputo). A total of 650 sample plots were established; 500 for the national inventory and 150 for the provincial inventories. This work constituted the first forest inventory in which it was possible to carry out field work in the entire country.

The NFI provides comprehensive information on the forest resources in quantitative (total and commercial volumes) as well as qualitative (species composition, forest structure, among other) terms. The overall accuracy of the total volume estimate at national level was put at 95% for all strata considered (forests and other wooded lands) and about 90% for the total volume in forest areas. The estimated total volume per hectare was 36.6 m3, for the productive forest and the total commercial volume per hectares is $11.3m^3$.

A detailed land cover change analysis was carried out in the Manica Province. LANDSAT 5 MT satellite images (1990 and 2004) were used to produce the interpretation. The Annual deforestation rate in the period used for analysis was estimated at 0.81%,, which corresponds to a net deforestation of c. 350 000 ha in dense forest and 85 000 ha in open forest in the period of 14 years (*Republic of Mozambique*, 2008). A model developed by FAO for FRA 1990 was used to assess the deforestation rate at national level. Using this method the net deforestation was estimated at 219,000 ha per year, which corresponds to annual deforestation rate of about 0.58%.

3.1.5 Market information on wood and NWFP based products - consumption patterns and trends, internal trade, import/export, etc.

Marketing is largely information-based and efficient marketing requires relevant quantitative and qualitative information regularly, reliably and at the lowest possible cost. Information is needed on markets (demand, end-uses, and supply), marketing factors (products, marketing and distribution channels, promotion and prices), competition, marketing environment (comprising social, economic, political, technological, regulatory, legal, cultural, infrastructural, etc. environments) and institutions related to marketing.

In the countries being reviewed, systematically collected, analysed and disseminated market information on wood and NWFPs is seldom available. Some information on wood and non-wood forest products may be available on the resource side or at the processing level. Even in that situation, this information does not easily reach a broad cross-section of stakeholders. A recent study in Tanzania (*FBD*, 2009) is summarised below to illustrate the situation on forest product sales and marketing in the region.

Forest products sales and marketing channels in Tanzania

The forest based industry in Tanzania is largely dominated by sawmilling, furniture marts and joinery. For example, the number of mills has increased from about 140 in 1998 to 367 registered in 2005. Most of these, however, are small scale sawmills with a log input not exceeding 5,000 m³ and employing about 5 to 8 persons. The total installed capacity of the mills is c. 2.7 million m³ per year of which 2.2 million m³ is softwood and 460 000 m³ is hardwood. However, the total utilisation capacity of these mills is less than 50% of the installed capacity. In addition, there are about 400⁺ small scale wood machinery (locally fabricated circular saw or roller bench with rails), most of them found at Sao Hill forest plantation, also processing saw logs. There has been a significant increase in the installed capacity compared to the annual capacity of 750 000 m³ in 2001.

There is a sharp increase in the demand for wood products in the country, such as timber and poles for construction, electricity and communication in the local and international markets, especially exported to the Middle East, Kenya, Burundi and other neighbouring countries. For example, sawn timber exports have increased from a completely insignificant 511 m³ in 2001 to 310 600 m³ in 2007. Also, poles export increased from 905 poles in 2004 to 31 200 in 2008. A strongly contributing reason for both is the logging ban in Kenya. On the other hand, sawn timber import is also growing, especially from Mozambique and Malawi (*MFAF*, 2010). Unfortunately, there is very little information regarding the movement of timber in the region, prices and demand in trading countries. This makes it difficult for individuals and private companies to invest and tap this market potential.

It should also be pointed out here that although the volume of sawn timber export has increased, most of the sawn wood produced is consumed in the local markets, because the quality of the products is low and they cannot compete in the international markets. Quality control and value adding processing are key questions to expand exports and compete with the imported quality products. A recent study by FBD (2009) has indicated that marketing and trade in forest products in Tanzania is affected by many factors, including distance from production to the marketing sites, poor quality of forest products, export financing, lack of appropriate trade policy, trade barriers and cumbersome procedures and bureaucracy. Therefore, while the policy and regulations provide a favourable environment for the private sector in forestry to grow, there are a number of challenges and or critical issues to be addressed at primary production, processing and trade levels (*MFAF*, 2010).

Some of the major factors affecting international trade in forest products include: small volume and inconsistent production, poor quality of products, cumbersome procedures bureaucracy, sometimes demand limited to a small number of known species (except for China, seen by many respondents to be ready to import practically everything irrespective of the quality).

Markets for forest product in the region have a long chain and are characterised by lack of reliable information on marketing of the products from producers to suppliers to end use manufactures. Most producers sell their products either to the traders, middlemen, or hire a truck to take the products directly to the market. The majority of traders receive market information from middlemen.

The study in Tanzania (*FBD*, 2009) showed that there are eight, enormously bureaucratically and technically complicated, steps required for exporting forest products, which include:

- a) Registration and Approval
 - Certificate of Registration for timber business (Export of Forest produce)
 - Application for Approval for Export of Forest Produce
 - Approval for Export of Forest Produce by the Director of Forestry and Bee Keeping

In order to get the above certificate and approval, the exporter is required to apply for export approval showing type of products intending to export, quality and destination countries. In this application, the following documents should be attached:

- Copy of registration of the Company
- Copy of the Trading License (oriented to export)
- Copy of income tax clearance certificates
- Copy of orders of enquiry from import indicating the tentative process agreed in USD or an international convertible currency per volume or quantity.
- Copy of statement of export return done during the year and certified by the banker
- Copy of certificate of registration from the Ministry of Natural Resources and Tourism to deal with or trade in forest produce
- A letter from the district or regional authority indicating that the said produce will be harvested in that district or region
- A contract from the saw miller or owner of the factory indicating that the said products will be processed by the factory
- A copy of MoU of the Company intending to do export trade
- b) Production at the Mill/Factory
 - The product is sawn/produced as per specified dimensions by the customer
 - The product is trimmed or cut to the specified dimensions as specified by the customers and standard
 - The product is treated, e.g. sawn timber is dipped to protect against blue stain
- c) Internal Grading and Bundling
 - The product is graded and stacked properly ready for transport
- d) Preparation for transport to exit port (Dar es Salaam)
 - A transit pass is sought from the Forest Office for each consignment/loaded bundles before transporting to the port. On the road the consignment must have a certificate of registration, delivery note and gate pass
- e) Offloading the product at the yard for grading and inspection
 - Grading is done by authorised grader before loading onto the containers
 - Issuance of certificates:-
 - Certificate of inspection of Forest produce,
 - Certificate of graded timber
 - Permit for export of graded product (e.g. sawn timber)

After grading and inspection, payments for grading and/or inspection and export permit fees are made as per regulation provided in section 106 of the Forest Act of 2002 and its amendment of Government Notice no.231 of 23^{rd} November 2009.

Grading and/or inspection of products due for export including inspecting the original harvesting licenses to make sure that the product(s) was legally obtained. These documents are retained after issuing export permit.

- f) Loading into containers
 - The graded forest products consignment is loaded into containers ready for shipping

- Locking at the containers with padlocks and retaining the keys before sealing the containers
- Sealing of loaded containers that involves custom officers, state security officers and Forest officers
- Containers transported to the harbour.
- g) At the Harbour customs office
 - Export product movement requires the following documents:

Type of document	Issues by	
Tax/commercial invoice document	Exporter	
Phytosanitary certificate	Ministry of Agriculture, Food Security and Cooperatives (Phytosanitary section)	
Bill of lading	Shipping Agency	
Grading certificate	Forestry and Beekeeping Division	
Certificate of origin	Tanzania Business Association (TBA) or Tanzania Chamber of Commerce, Industries and Agriculture (TCCIA)	
Packing list	Exporter	

h) Shipping

• After fulfilment of all above requirement, the consignment is ready to be shipped.

The current forest products licensing and removal procedure is often done manually and inefficiently. The export procedure described above is obviously very cumbersome and bureaucratic. There is a lot of paper work (documentation) involved which also necessitates one to move from one office to another because there are many institutions involved and their offices are not located in the same place. Additionally, there are unsubstantiated, but not unlikely, allegations of corruption in the sector claimed by many stakeholders to be fuelling illegal exploitation and illegal trade of natural resources.

Finally, internal trade is very much based on personal relationships. Most traders are reluctant to do business with unknown partners.

3.1.6 Mechanisms to safeguard phyto-sanitary and germplasm quality conditions, prevention of invasive species

International exchange and trade/movement of germplasm is crucial in the quest for adequate production and supply of plants and plant products. There being need to ensure that foreign injurious pests, diseases and noxious weeds which do not exist in a country are not introduced, there are plant introduction and certification procedures to be followed. Plant quarantine services were started in East Africa already in the 1930s. A phytosanitary convention for Africa was approved by the Heads of African States and Governments of the Organisation of African Unity in Kinshasa DRC in 1967, to take all possible steps to (a) prevent the introduction of diseases, insect pests, and other enemies of plants into any part of Africa; (b) eradicate or control them in so far as they are present in the area; and (c) prevent their spread to other territories within the area (*OAU*, 1967).

Currently, all phytosanitary measures are based on international standards as in the International Plant Protection Convention (IPPC) and the World Trade Organisation (WTO) agreement on sanitary and phytosanitary (SPS) regulations and guidelines which also recognises authority per country.

International standards for phytosanitary measures are prepared by the Secretariat of the International Plant Protection Convention as part of FAO's global programme of policy and technical assistance in plant quarantine. FAO Members and other interested parties are provided with standards, guidelines and recommendations to achieve international harmonisation of phytosanitary measures, with the aim to facilitate trade and avoid the use of unjustifiable measures as barriers to trade.

Member countries are encouraged to use international standards, guidelines and recommendations where they exist. However, members may use measures which result in higher standards if there is

scientific justification. They can also set higher standards based on appropriate assessment of risks so long as the approach is consistent, not arbitrary.

In all countries surveyed, with the exception of Kenya, phytosanitary services are hosted or conducted under the Ministry responsible for Agriculture. Until 1996, when the Kenya Plant Health Inspectorate Service (KEPHIS) was established to take responsibility on matters related to plant health and quality control of agricultural inputs and produce, the Ministry of Agriculture was responsible for plant quarantine also in Kenya.

Importation of any form of plant material into a country is subjected to strict specified conditions outlined in the Plant Import Permit as follows:

- All plant importers intending to bring plant material into a country must obtain a Plant Import Permit, issued after careful appraisal of the risk involved in importing the intended plants/plant product. The permit specifies the requirements for plant health, indicating prohibitions, packaging, conditions for release at the point of entry, etc.
- Any plant consignment arriving into a country must be accompanied by a copy of a Plant Import Permit and a Phytosanitary Certificate which verifies that a competent authority in the exporting country examined the plant material for pests and diseases prior to their leaving the country of origin and that the plant materials meet the country of entry phytosanitary requirements.
- Plant material arriving in a country without authority and correct accompanying documents is not allowed entry and may be destroyed or reshipped at owner's cost.
- All imported plant material must be declared to a plant inspector at any point of entry.
- Any person who contravenes or fails to comply with the regulations shall be guilty of an offence and shall be liable to a fine or imprisonment or both.

Efforts for afforestation in the region cannot succeed without a secure source for germplasm. At present, there is a substantial movement of seed, wood and other plant materials in the region and beyond. Tanzania is importing tree seeds from Zimbabwe and South Africa, Uganda importing tree seeds from South Africa and Brazil and collaborating with China to promote bamboo and rattan, the Kenya Seed Centre exporting to Ghana, Malawi, USA and other countries and Zambia (ZAFFICO) importing *Pinus oocarpa* seeds from Malawi. Also there is an increased movement of timber (either legally or illegally) in the region, and the competence of plant inspectors to handle timber and other forest produce, as well as the capacity of the ministries responsible for agriculture to station inspectors at all major entry points, are questionable and need strengthening. There is collaboration among various institutions, which is commendable.

3.2 Swedish institutions and mechanisms

It has long been realised in Sweden how essential it is to build decisions on the management, use and conservation of forests (both at national, enterprise and individual unit levels) on a long-term perspective, on reliable facts and figures based in science and solid experience, on well trained professionals responsible for managing forests at all levels, and on a functioning market and communication infrastructure.

The institutions and mechanisms supporting the forestry sector in Sweden have evolved over the last 100-125 years and are today strong and well established. This applies, apart from policies and legislation mentioned in the previous section, to research, education, training, extension, resource inventories and provision of reliable data, phyto-sanitary services, conflict resolution mechanisms, physical infrastructure, etc.

Higher education and a substantial part of research on and for forestry are done at the **Faculty of Forestry** at the Swedish University of Agricultural Sciences where both professional forester (M.Sc.) and forest engineer (B.Sc.) degrees are awarded. The Faculty has had considerable collaborative programmes with various institutions in Africa over the last 25 years. Some aspects of forestry, wood science and forest industry technologies are also taught at some other universities. Jointly with the private forest industry and the forest owners' associations, the Ministry of Agriculture, under which the Agricultural University falls, also supports the **Swedish Forestry Research Institute**, which is the main provider of applied research services to the forestry sector. In 1923, when the second Forestry Act was passed (see section 2.2 above), the **National Forest Survey** was set up that has since continuously provided statistically reliable information on the quantitative and qualitative conditions of Sweden's forest resources. Over the years, new aspects of interest (i.e. apart from forest areas, volumes, age-classes, tree species, damage to trees) have been added to the survey, e.g. on soils, biodiversity and carbon sequestration. Today, the Survey is attached to the Forest Faculty. This institutional home guarantees that the statistics and information generated is impartial and used in research and higher education.

Apart from its main role as a regulator and overseer of the forest legislation and policies, the **Swedish Forest Agency** also provides advice and extension services to forest owners and is the main provider of information on the forest sector (including material from the National Forest Survey), e.g. by issuing a Forest Statistics Yearbook. Also the **Forest Owners Associations** provide extension and training to their members. Formal training of Forest Technicians is provided by both Government Schools and private industry and forest owner institutions.

Because forest land was predominantly owned by private farmers and the wood-based industry by others there was early on often much distrust between sellers and buyers of timber and pulp-wood. There was an obvious need to resolve the problem of how to measure the wood in order to agree on what volumes and qualities were traded, and what prices were reasonable. Neutral **Wood Measuring Societies**, run jointly by sellers and buyers, were set up in the 1930s. They have resulted not only in a much better enabling and trust-based business environment but also provided correct statistics on felling, transport, export, import and consumption of wood and wood-based products.

There is today a **high degree of collaboration** between the major actors in the forest sector in Sweden – forest owners, industry and Government – around research, education, technological developments and transport infrastructure (Sweden has a very dense and well integrated forest road network, for example), which has contributed to creating a strong sense of common purpose within the sector.

3.3 Suggested areas for cooperation

In the course of the consultations and analyses done in the context of developing this report, we have initially identified five possible areas for cooperation in the wide field of "strengthening institutional and technical capacity" between partners in Eastern and/or Southern Africa on the one hand and Swedish and other external partners on the other. Naturally, there are an almost unlimited number of urgent activities suitable for various forms of collaboration on issues related to institutional strengthening. On the other hand, the purpose of the programme is not to identify *every* possible opportunity for collaboration that can be thought of, but rather a very carefully select number that may realistically be further developed and attract the necessary support to make them feasible to implement.

Thus, in very brief summary, the five areas are described below. The full project proposal concept notes developed around them are found in *Appendix 3*.

1. Inventory and monitoring of forest, wood and NWFP resources

There is considerable uncertainty in eastern and southern Africa on the magnitude and dynamics of forest and tree resources. Old figures for forest area are often quoted and repeated without any critical analyses of where they are taken from and the magnitude of trends and changes that have prevailed since the original figures were generated. Most of the knowledge on forest and tree resources, and their uses and trends, that does exist emanate from a large number of uncoordinated studies, spread over time and space, carried out as research projects, studies by NGOs, and/or in foreign funded "development" projects. In some countries today, e.g. Tanzania and Mozambique as described above, more elaborate assessments are being made, also with support from FAO.

It ought to be a high priority for the countries of the region to generate reliable and regular information on resources (trees, wood, NWFPs, carbon, services, etc.), analysing and using such information for monitoring changes and trends, market statistics and trade flow analyses, measuring environmental influences, certification, and, not least, having mechanisms in place to satisfy the information needs associated with the many new climate, trade and environmental

processes and schemes, such as CDMs, FLEGT, REDD and similar. Since the 1920s, Sweden has had a National Forest Inventory programme and institutions to carry out such work.

The proposal aims at developing a programme on how Swedish and other (e.g. FAO) institutions can work with partners in E & S Africa to build regional capacity to *Inventory and monitor forest, wood and NWFP resources,* particularly the magnitude and dynamics of these resources from biological, geographical and economic points of view.

2. Strengthening of forest research

The institutional basis for forest research is reasonably well developed in E/S Africa, both with respect to Faculties/Departments of Forestry at many Universities and Government Research Institutes. What is often lacking, however, are enough resources to adapt research programmes and priorities to changing needs and opportunities, and to renew staff competences in emerging areas and in sufficient numbers to effectively tackle up-coming research needs. This particularly applies to the many new challenges that require broader and more interdisciplinary research approaches to be effectively addressed, e.g. the climate-forest issues, the conflict for land for different uses, the value chain analyses needed to understand the income generating potentials of various forest/tree-derived products, and several others. Many of these, as well as many research needs of a more "conventional" nature are too large to realistically aim at building up capacities in each individual country to effectively address them.

One interesting approach to building research capacity, while at the same time generating knowledge on essential issues, is to work with "regional research schools" in forest sciences. Discussions are well underway between the Forest Faculties at the Swedish University of Agricultural Sciences (SLU) and the Sokoine University of Agriculture (SUA) in Tanzania to form an "axis" around which a network of institutions will be linked in a regional research school in E/S Africa and the Nordic countries. The AFF/KSLA proposal wholeheartedly endorses this initiative, and has merged with it in continued developments.

3. Building up Forest Certification capacity in Africa

Forest certification is a mechanism by which well managed forests are able to communicate information about the quality of the forest management to their markets. In order to achieve this, forest certification schemes are based on two strategic tools. Firstly, the schemes develop national performance standards which can be applied at the level of the forest management unit and which assure that forest management will be sustainable. These standards are developed in consensus by national forest stakeholders. Secondly, the schemes develop systems to inspect and evaluate the forest management against the standard and in cases where the forest management meets the requirements of the standard then compliance certificates are issued. Forest owners can then use these certificates to market their products. Forest certification on its own cannot ensure commercial success and it is important that the forest product processing is also of a high quality. However, forest certification in combination with a high quality product can give access to high value markets.

In Africa, very small areas of managed forests and of trees outside forests are certified through any of the internationally accepted systems. The same applies to the trade in forest products. There are several reasons – high cost of certification, no local bodies able to carry out certification, no need since neither the local market nor a substantial part of the export market (Middle East, neighbouring African countries or Asia) demand certified wood, etc. However, if African countries shall be able to realise the commercial potential that lies in the production, value adding and trade/export of wood and non-wood products derived from sustainably managed forests and tree plantations, there is little doubt that the degree of certification must increase significantly.

In Sweden, where commercial forestry is totally dependent on the export of fibre and wood products, virtually all forest areas under active management are certified. The proposal aims at linking the existing Swedish experience in certification with African institutions in order to contribute to building up capacity in E & S Africa to carry out certification of forest operations, products and trade in order to promote SFM.

4. Analysing needs for improved technical level forestry training in E & S Africa

In view of the increased importance of opportunities and problems associated with forests and trees today – income generation for farmers and communities, climate change mitigation and

adaptation, provision of energy, enhancing food security, hydrological and other environmental services, ecotourism, wood and NWFP processing, value adding and trade, etc. – all of which will require hands-on ability to work with trees and forests, more forest technicians are urgently needed. Apart from "traditional" technicians' training in forest management and protection, a new breed of forest technicians will also need to have skills in extension and development work with farmers and communities, how to communicate information to such audiences, inventory and assessment skills in relation to various certification and fair trade schemes, "clean development mechanisms" (CDM), "voluntary carbon markets", REDD+, and other mechanisms that will require considerable back-up work on the ground. Another requirement will be for technicians who can manage, or assist communities and NGOs to manage, small scale wood- and NWFP-based industries and trade. Actually, a modernised forest technician training could be a very suitable back-ground for entrepreneurs in the forestry, tree and wood sectors.

In Sweden (and in Finland), forest technicians and engineers, have always played essential roles in managing forests and forest operations. The training and education of these categories have gradually adapted to changing needs and opportunities in the professions and the quality of the schools providing such training is today very high. Many have been involved with training also of students from Africa, e.g. the School of Forest Engineers at SLU that has had a long and intensive twinning arrangement with the Wondo Genet College of Forestry in Ethiopia.

This proposal has as its primary aims to analyse the needs to strengthen and modernise forest technician training in E & S Africa at all levels, and to identify and initiate concrete actions to achieve this, both at existing national institutions, and by looking at the merit and feasibility of regional approaches to forest technician training.

5. Facilitating the up-grading of tree seed germplasm improvement in E/S Africa

It is well known that use of improved tree seed germplasm will normally enhance quality of trees, their productivity, resistance to pests and diseases and adaptation to possible climate change (if improvements have been done with these aims in mind!). Availability of improved germplasm will promote its commercialisation and exchange within the region. Current afforestation, reforestation and agroforestry activities are today mostly characterised by the use of poor quality germplasm resulting in poor performance, low productivity, susceptibility to pests and diseases and, possibly, low resilience to climate change effects.

The current challenges and opportunities facing the forest and tree sector in E & S Africa – income generation through wood and NWFP production at farm and community levels, climate change adaptation, commercial level production of timber and fibre for domestic and export markets, using trees to increase food security (income, fertility, fruits, etc.), and others – will require a functioning provision on a large scale of high quality tree germplasm. The risks associated with *not* having access to seed of known quality and properties will potentially be very damaging. The point is that without a thorough knowledge of the properties of various tree seed sources, a technical and scientific ability to improve such properties through selection and/or breeding, and a practical and institutional capacity to multiply and distribute seed of high and known quality, many ambitious forest/tree related initiatives will be futile. In short, there is an urgent need to rebuild both the technical and infrastructural capacities of Tree Seed Centres, Tree Improvement programmes, and commercial and public seed multiplication and distribution/sale mechanisms.

This proposal aims at assessing the current status of tree germplasm improvement, production and supply in Eastern and Southern Africa, and at drawing up a plan for and initiate pilot activities to revamp institutional capacities to enhance the genetic quality of propagules used for forestry programmes.

4. Organising and empowering stakeholders in the management and use of forest and tree resources

4.1 Current situation with regard to organisation and strength of relevant forest and tree stakeholder groups in eastern and southern Africa

4.1.1 Eastern Africa: Community Stakeholder Organisations

In E and S Africa, 15-30% of the forests are in protected areas, i.e. in reserved forests, game reserves and national parks. For example, in Uganda 15% of the forests are in reserved forests, 15% in national parks and 70% are in local and community forests. This means that the largest proportion of trees and forests in the region are in the custody of, and managed by, communities. In response to this, there are growing efforts to build the capacity of communities to manage their forests and to improve the policy and institutional framework for them to operate effectively. This is epitomised by the widespread promotion of participatory forestry and similar initiatives such as community involvement in forest management. There has also been widespread adoption of joint and collaborative forest management initiatives for the management of reserved forests.

Tree growing by individual farmers or households in farmlands is also growing significantly. To strengthen the participation and role of the communities in forest management initiatives, these have organised themselves into various community organisations. In other cases, governments have facilitated or provided for the establishment of community organisations in their forest legislation to allow for community participation in forest management. During the survey a number of community stakeholder organisations were identified and these are summarised in tables 4.1 and 4.2 below.

Community stakeholder organisations	Examples	Strengths/ membership	Roles
Small-scale timber producer associations	Uganda	Membership; have a registered Collaborative Forest Management agreement with the National Forest Authority	Represent and organise members for establishing small timber production.
Timber Producers' Association	Zambia	Membership; registered as NGO	Represent and organise members Capacity building Advocacy
Community Forestry Associations	Kenya Uganda	Registered as CBOs	Legal entity through which communi- ties enter into a management agree- ment with KFS
National Community Forestry Associations	Kenya Uganda	Members are the community forestry associations	Represent its membership Build capacity of CFAs
Collaborative forestry associations	Kenya Uganda	Have a registered Collaborative Forest Management agree- ment with NFA	Development and management of forests on community lands and in central forest reserves Focus is on co-management of forest resources in reserved forests
Forest Dwellers' Association (WAJIB)	Ethiopia	Membership, but not registered	Joint forest management
Forest conservation cooperatives	Ethiopia	Registered as legal entities	Enable communities to enter into forest management agreements with the state forest agencies
Forest user groups	Ethiopia Kenya		 Represents forest user groups Promotes forest based enterprises: Beekeeping Ecotourism Natural foods production

Table 4.1: Community based organisations in eastern Africa

			Medicinal plants
Association of Forest Users/Forest conserva- tion union	Ethiopia Kenya e.g. Kenya Association of Forest Users (KAFU)		Represents several forest user groups
Network for Collabora- tive Forest Management Associations	UNETCOFA- Uganda		Promoting forest-based enterprises and income generating activities Capacity building and partnerships Training of CBOs in forest management Information and experience sharing, e.g. in conflict resolution Resource mobilisation
Federation of Commun- ity Forest Networks (MJUMITA)		Membership organisa- tion representing 74 community groups/ networks	Brings communities involved in participatory and joint forest management together to share experiences and exchange ideas. Advocacy platform for community rights

The nature of community stakeholder organisations is often a function of the land tenure and ownership situation of the forest resources. Most forests fall under three categories of ownership, namely:

- Reserved or gazetted forests that are managed by governments;
- District and local forest reserves that are managed by local authorities or designated communities;
- Communal forests that belong to a community and are managed collectively by the community members. These forests may be formally gazetted as community or village forests or simply be held in custody for communities by local authorities or traditional leaders.

In all cases when communities have access to any of these types of forests they do so as communities and not as individual members. Thus, the most defining factor in determining the nature of the stakeholder organisations and their roles is the ownership and or access and use rights to the forests and woodlands.

The most common scenario in most countries is that forests that are outside central and local reserved forests are usually communally-owned and used under customary law by an identifiable community of interdependent users living in and around the forest. The use by members is generally regulated by cultural norms. In some countries, like Tanzania and Malawi, forests and woodlands which are outside reserved forests and are on customary land, are managed by communities through customary arrangements and through legal rights conferred by law. In Malawi, the legal rights are conferred under the Village Forest Act of 1926. In Tanzania, these rights are conferred under the Village forest reserves that belong to and are used by specific communities. Under these circumstances, the forests are managed collectively by the whole community through organised structures such as village/community forest management committees.

In the last 25 years, following the growing popularity of community based forest management, many countries have initiated forest management programmes that give communities living adjacent to reserved forests the right to access and use these forests under defined conditions. A common feature in East Africa is that for communities to participate in these programmes, they are required to form community forest associations or user groups that are registered before they can apply for and be granted forest management agreements to use sections/portions of the forests adjacent to them. Most of the community and collaborative forest associations defined in *table 4.1* fall under this category. For example, in Kenya, the community *based organisations* (CBOs) that have management agreements to use specified areas of the reserved forests. Forest user groups in one forest station (a management zone defined by the Kenya Forest Service) are required to join together to form one community forest association (CFA). In Uganda, collaborative forest associations have to be registered as CBOs for them to secure a forest management agreement

with the National Forest Authority (NFA). Some of the associations that are specialising in timber production have formed small-scale timber producers associations to represent and lobby for their members.

4.1.1.1 Forest User Groups

In east and southern Africa some community members involved in the harvesting or use of forest resources have formed specific forest user groups primarily to facilitate the activities of members and to represent and promote their interests. Examples of such user groups include:

- o Bee-keeping
- Ecotourism
- o Natural foods production
- Tree planting (Pines and Eucalypts)
- Craft-making
- Medicinal plants
- Harvesting concessions

The user groups are usually formed around a product/commodity to help the members in the production, processing and marketing of the commodity. In the majority of cases these are formed where the users are producing the commodity from the same communally owned area. This enables the members to coordinate their production, share skills and knowledge, resolve conflicts and sometimes coordinate their marketing.

Needs, constraints and opportunities

The user groups in many countries are self-selected and comprise members who have the same interests. However, most of them are currently very weak in terms of level of organisation, type of technology used, business orientation and capacity. The result is that their production is still at subsistence level with limited opportunities for taking advantage of the potential to produce for markets. Where some groups produce surplus for sale, the marketing tends to be disorganised and characterised by lack of understanding of the markets and the whole value chain.

The existence of the numerous user groups producing the same product or commodity, e.g. mushrooms or honey, provides an opportunity for establishing commodity associations for improved production and marketing of the commodity. This allows for bulking, adoption of the same product quality standards, organised marketing and ensuring consistent supply to the market. This would eliminate competition between individual users and user groups and also facilitate exchange of information and experience. This has been very successful in honey and craft marketing in southern Africa. For example, the bee-keeping associations in the North Western Province in Zambia were able to supply the European markets with organic honey from certified forests through this level of organisation. There is also need to strengthen the capacity of the user groups in value addition to improve benefits from their products and contribute to the local economies. Currently most of them are using very rudimentary technologies and could benefit from access to improved technology.

4.1.1.2 Community or Collaborative Forest Associations

In eastern Africa there is a general trend of allowing local communities to participate in the management of reserved forests that are adjacent to their areas. However, to be able to participate the local communities are required to form community-based organisations (CBOs) called community forest associations or collaborative forest associations that are registered. For example, in Uganda, communities are required to form collaborative forests associations (CFAs) to be allocated part(s) of the reserved forests held by the National Forest Authority (NFA) for their management and use. In Kenya, the law requires that the different user groups in a given area (forest station) come together to form a community forest association. These are legal entities through which communities enter into management agreements with the Kenya Forest Service. Several CFAs together with other stakeholder representatives form forest conservation committees in each conservancy. In Ethiopia the forest user groups form forest conservation unions.

Needs, constraints and opportunities

The CFAs are established primarily to enable communities to have access to reserved forests and to negotiate and engage with the national forest authorities. This tends to limit the scope of their

activities, at least in the initial stages, to their relationship with the forest authority. However, in many cases, these have grown and broadened their scope to covering the wider interests of their membership, in particular, building technical capacity in forest management, building their knowhow in processing and representing their membership interests within society. Unfortunately, most of them still lack organisational capacities to self-manage and mobilise their own resources to transform themselves into strong organisations. They also lack financial resources, business skills, technical know-how, knowledge of markets and value chains. The CFAs, however, offer a very good platform for representation of their members' interests. Many of them have already taken up this responsibility and in many areas have formed networks and apex organisations to strengthen their voices and share experiences. There are efforts to extend the establishment of CFAs to other areas outside reserved forests and this offers an opportunity for ensuring that all community forest stakeholders are organised. The CFAs could therefore benefit from capacity building and exposure to how other stronger and effective associations are managed.

4.1.1.3 National networks/federations of community forestry associations

In countries where community or collaborative forest management associations (CFAs) are in place, apex bodies to represent them have been established. Examples are the Uganda Network for Collaborative Forest Management Association (UNETCOFA), the National Association of Community Forestry Associations (NACOFA) in Kenya, and the Federation of Community Forest Networks (FCFN, or MJUMITA in Kiswahili) in Tanzania. Area specific associations or networks have also been esta-blished in some areas to facilitate easy coordination and address special interests. An example in Uganda is the Budongo Forests Community Development Organisation (BUCODO). The major roles of these institutions are:

- Facilitate community participation in policy processes
- Empowerment of communities around forests
- Provide technical services to members
- Provide advocacy platform for community rights
- Capacity building of the CBOs especially for policy advocacy
- Promoting forest-based enterprises and income generating activities
- Capacity building and partnerships
- Training of CBOs in forest management
- Information sharing and experience, e.g. in conflict resolution
- Resource mobilisation

Constraints and opportunities

Community forestry associations, as legally recognised community stakeholder organisations, provide immense opportunities for strengthening the involvement of communities in forest management and forest policy processes. Whilst they are a relatively recent phenomenon, they have already demonstrated this capacity and played the role effectively. For example, UNETCOFA in Uganda represents community interests in national policy platforms such as the Uganda Forest Working Group. MJUMITA and NACOFA play the same role in Tanzania and Kenya, respectively. The secretariats of these organisations are manned by professionals and have the capacity to coordinate their members and represent their interests in national fora. For example, in Uganda, UNETCOFA successfully lobbied NFA to set aside 10-15% of plantation development land for their members. They also successfully engaged the "sawlog production scheme" to support their members where the latter had preferred to work with individual, medium to large scale plantation developers. These institutions therefore provide opportunities for linking and engaging with regional and international partners.

The major weakness of them is that in some countries they have been established by the forest services as administrative organisations rather than independent stakeholder institutions. For example, in Kenya the Kenya Forest Service (KFS) is responsible for the formation of these associations by management zone. This tends to weaken the associations and make them dependent on KFS. The lack of independence is currently illustrated by the conflict between KFS and NACOFA. The latter was formed independently by some members of the community forest associations but the KFS is now questioning their legitimacy as they are not provided for in the Forest Act. The Act provides for the Kenya Association of Forest Users (KAFU). Notwithstanding these controversies, these associations provide excellent platforms for strengthening the organisation and role of small-holder forest owners and users to participate effectively in the development and management of forests in their countries. What is required is to improve their organisational capacity to enable them to effectively champion the interests of their members. In

particular, they need capacity to solicit for views of their members and provide platforms for effective dialogue within the membership. They also need to have effective financing strategies for mobilisation of financial resources to sustain the organisations and enable them to undertake their own activities independently.

The existence of national associations and networks in east Africa provides an opportunity for facilitating sub-regional collaboration amongst small-holder forest owners and users in the region. Members of KAFU, NACOFA, UNETCOFA, MJUMITA and the forest conservation unions in Ethiopia could come together and form a regional network/association of community forest associations to promote the interests of small-holder and community forest owners in the region. These networks, especially MJUMITA, UNETCOFA and NACOFA that were initiated under the EMPAFORM project have already been interacting amongst themselves. The role of the regional association could include representing community interests and participating in sub-regional and international forest policy processes, facilitating information exchange and experience sharing, advocating for the rights of small-holder and community forest owners, coordinating and harmonising community views and building a strong regional community voice.

4.1.2 Southern Africa: Community Stakeholder Organisations

In southern Africa, most local communities are engaged in the management and utilisation of forests in communal areas with very few engaged in collaborative management of national reserved forests. In Zambia, there are local reserved forests that were originally managed by the Forestry Department that have now been opened up for joint management with local communities under the joint forest management (JFM) programme. This was initiated in 2002 on a pilot basis. The programme provides for the establishment of village forest management committees to facilitate and coordinate the community activities. Within a community there may be different forest user groups, for example beekeepers and pit-sawyers. However, JFM is still too young and limited in extend for formal community associations yet to have been established. In the open or customary forest areas the most common form of stakeholder organisation is forest user groups, especially around the production and marketing of non-timber forest products. In Malawi, Mozambique, Zambia and Zimbabwe, the most common are beekeeping associations, mushroom producing groups, and craft groups and associations.

The community-based natural resources management movement in southern Africa has had a major influence on community participation in natural resources management. Community based natural resources management (CBNRM) can be defined as an approach to natural resources conservation and rural development in which the people who live with, and benefit from, the natural resources are the major players in the management of such resources for their own benefit. CBNRM is based on the premise that if local people have a large degree of control over their natural resources and are able to benefit from management of these resources, then they are likely to use these resources sustainably. This approach was initially adopted by the wildlife sector as a means of devolving management and utilisation of wildlife resources to local communities. It has since spread to other resources including forests. Under this approach, local communities that have resources of value form local institutions for their management and controlled utilisation. These local institutions are very varied in nature and scope, ranging from small forest user groups and community trusts to community resource boards, covering anything from part of a village to whole chiefdoms and districts (table 4.2). The common functions of these institutions include organising the users to manage, regulate use and ensure equitable sharing of benefits from the resources, and to liaise with local authorities and central government agencies responsible for the resources (wildlife and forestry authorities).

Community stakeholder organisations	Examples	Strengths/ membership	Roles
Forest user groups	Baobab/marula producer groups in Zambia and Mozambique	Village or ward based, although not yet registered	Forest user/interest group Organisation and management of own activities Promotes forest based enterprises: • Beekeeping • Ecotourism

Table 4.2. Community based organisations in southern Arrica	Table 4.2: Community	based organisations	in southern Africa
---	----------------------	---------------------	--------------------

			Natural foods productionMedicinal plants
Marketing Associations	Beekeeping and craft associations Malawi, Zambia	Registered CBOs, Membership	Organise members Bulking and marketing their NTFP Contract/price negotiation with buyers
Community Resource Boards	Zambia	Registered CBOs, one per game management area (GMA)	Committees representing all village action groups in a GMA Oversee use and management of all natural resources in a GMA Supervise and coordinate activities of forest user groups
Community Trusts	Zimbabwe, Zambia, Botswana	Registered CBOs	Represent communities Facilitate commercial use of natural resources Negotiate and administer contracts for private sector
Community Based Natural Resources Management Forum (CBNRM)	National CBNRM Forum Botswana, Namibia	Some are registered Most are loose networks. Membership across natural resources sectors	Platform for information sharing and exchange Multi stakeholder Lobbying and advocacy
Natural Resources Management Associations	CAMPFIRE association in Zimbabwe, NACSO in Namibia	Registered, membership	Coordinating member activities Representing members interests Supporting user groups
Regional network	Marula network	Loose membership, not registered	Facilitate and organise marketing of marula oil Information exchange and sharing
Regional network	Southern Africa Natural Products Trade Associa- tion (Phytotrade)	Registered NGO, Membership	Represent members interests Market development Research and development Capacity building and advocacy

National CBNRM Forum

In the last ten years, the practitioners involved in promoting CBNRM have facilitated the formation of national CBNRM fora for sharing lessons and experiences and to lobby for improved policies and institutional arrangements. The membership is drawn from local communities, community based organisations, non-governmental organisations, government, research and academic institutions.

Regional southern Africa CBNRM Forum

In the last five years, seven countries in southern Africa (Botswana, Malawi, Mozambique, Namibia, South Africa, Zambia and Zimbabwe) have established functional National CBNRM fora that have, in turn, formed a regional CBNRM forum for facilitating sharing of information and sharing experiences at regional level. This was established with the support of WWF. These forums are not dedicated to forestry but have thematic working groups that cut across resources. Due to the low timber potential in the region there are very few forest user groups involved in tree growing or management for timber purposes. The majority of the forest user groups are for the production of non-timber forest products.

Strengths and opportunities

The national CBNRM forums provide an opportunity for promoting holistic natural resources management at community level. However, due to lack of resources and low levels of organisation the forest user groups in these fora are currently very weak. The fora are dominated by NGO and government representatives. There is potential to organise the forest user groups to improve focus on forests, strengthen their organisation and capacity to represent their interests in the CBNRM and other national fora and to improve their skills in production and marketing for their own benefit.

4.1.3 Private/Commercial timber producers

4.1.3.1Introduction

The commercial forestry sector in eastern and southern Africa is based on wood from both natural and plantation forests. The natural forests and woodlands are dominated by miombo woodlands in the southern and central parts of the region. These are characterised by few and low densities of valuable timber species. The main ones are *Afzelia quanzenzis, Pterocarpus angolensis* and *Miletia stulmania*. The most extensive belt of timber in the region is the Zambezi teak forests area that is found on Kalahari sands in parts of Botswana, Namibia, Zimbabwe and Zambia. The main timber species in this woodland type are *Baikiae plurijuga, Pterocarpus angolensis, Guibortia coleosperma* and *Afzelia quanzenzis*. These forests have been exploited for commercial timber since the beginning of the 20th century. Due to the slow growth of the timber species and poor management of the forests there are very few areas left with adequate timber stocks to support medium to large scale commercial timber exploitation. This is particularly pronounced in southern Africa where most countries no longer have commercial industries based on natural forest and woodlands. In Zimbabwe, for example, the natural timber industries have declined. In Botswana, commercial logging was officially stopped in the late 1990s. Commercial harvesting is still significant in Mozambique and Western Zambia but is now dominated by small-scale companies and pit-sawyers.

In east Africa, the only significant natural forests with some valuable timber tree species are found in the rainforests and wet savannas of Uganda and in the montane forests of Kenya, northern Tanzania and Uganda. The main species in the Ugandan rain forests are the mahoganies (*Khaya* and *Entandophragma* spp.), *Milicia* (*Chlorophora*) *excelsa*, and a few others. In the mountain forests, there are a few valuable timber species, such as *Podocarpus* spp., *Juniperus procera*, *Vitex keniensis*, *Olea* spp., *Prunus africana*, *Cordia africana*, and some others. None of these trees remain in commercially interestring populations anywhere in east Africa today.

The decline in natural timber supplies has seen a significant growth in exotic forest plantation development in all countries in eastern and southern Africa to meet the growing timber demand. The dominant plantation species are pines and eucalypts with smaller areas under cypress and wattle (Acacia).

In southern Africa, the sector is dominated by medium to large companies that manage large scale plantations. In the last fifteen years there has been an increase in the number of small-scale producers through outreach and out-grower schemes. In Mozambique and southern Tanzania, there is currently rapid expansion of plantation forests by both large scale companies and small-scale growers. In east Africa, the area under plantation forests is still relatively small but there is rapid expansion in plantation forests development especially by small-scale growers through various initiatives including the collaborative forest management schemes. For example, in Uganda the sawlog production grant scheme (SPGS) is supporting more than 100 small-scale private timber growers and collaborative forest associations to establish forest plantations.

Although commercially interesting timber species have been depleted, natural forests and woodlands are still very important as sources of charcoal for both domestic and commercial purposes. Charcoal is the main form of wood energy in most countries (with the exception of countries south of the Zambezi that use firewood). Charcoal production is a multi-million dollar industry in many countries but it is almost entirely in the hands of small-scale producers. A recent survey in Kenya estimated the value of the charcoal industry to be USD 425 million annually, whilst in Zambia charcoal production employs more than 400 000 people. The natural forests are also significant sources of wood and other materials for crafts, which is an important industry in several countries, e.g. Kenya, Uganda, Zambia and Zimbabwe. In Kenya, the industry is estimated at USD 20 million per year and employs 50-60 000 people (*Choge et al.*, 2005).

4.1.3.2Commercial stakeholder organisations

Whilst there are several commercial forestry activities in the region, the degree of organisation of the key stakeholders is surprisingly low, especially in east Africa. The situation is, however, changing slowly, especially with the expansion in commercial plantation forestry. This has seen the establishment of timber growers/producers associations in several countries in the region. There are, however, very few stakeholder organisations representing wood and other forest products processors in most countries. The most common commercial stakeholder organisations found in the region are shown in *table 4.3* below.

Stakeholder organisations	Examples	Strengths/ membership	Roles
Timber Growers'/ Producers' Associations	Uganda Timber Growers' Association South African Timber Growers' Association	Membership organisa- tion that is registered 70 members own 60% of plantation area	Promoting commercial forestry Lobbying and advocating for favourable policies Training of members, research Information sharing and exchange Liaison with similar organisations in Africa
Small-scale timber producers associations	Timber Producers Association, Zambia (TIPAZ)	Registered Membership	Represents small-scale timber producers Lobbying and advocating for favourable policies Training of members, research Information sharing and exchange
Timber Council		Not registered Loose membership	Platform for Representatives of growers, sawmillers and manufacturers Sector coordination Policy advocacy
Timber Manufacturers Associations	Kenya Timber Manufacturers' Association	Membership drawn mainly from saw-milling companies About 300 members Registered	Lobbying and advocacy Representing members in Forest conservation committees and Forestry Working groups Association currently not very active following ban on logging
Forest Industries Development Associations	Tanzania Forest Industries Asso- ciation (TAFIA) Forestry South Africa	Membership mainly drawn from saw-milling companies	Representing members' interests Lobbying and advocacy Information exchange
Charcoal Producers Associations	Zambia, Kenya and Mozambique		Representing members' interests Lobbying and advocacy NB: Not functional in Zambia and Kenya
Small-scale furniture manufacturers' associations	Kenya	Membership Not registered	Representing members' interests Lobbying and advocacy

Table 4.3. Private/Commercial stakeholder organisations

4.1.3.3Timber growers/producers' associations

In southern and eastern Africa there is a rapid expansion of plantation based timber production by both large companies and small-scale growers. The timber growers in most countries are organised into timber growers'/producers' associations. Examples include the Uganda Timber Growers Association (UTGA), the Timber Producers Association of Zambia (TIPAZ) and the South African Timber Growers Association (SATGA). These may have sub-national chapters and/or regional associations as members. In other cases, companies and small scale growers may have their own associations affiliated to the national association. Examples include the CFAs of Uganda that are members of UTGA, and SATGA that is a member of Forestry South Africa. The main roles of these associations are to represent the interests of members, improve negotiating power with markets and input suppliers, build the capacity of members and lobby for favourable policies and legislation.

In some countries, for example Zimbabwe and South Africa, the major timber companies have integrated operations that include timber growing and processing, e.g. sawmilling, pulp and paper processing or production, of other wood based products. For example, the Timber Producers' Federation of Zimbabwe is an association of plantation growers and sawmillers involved in the promotion of timber based products, research and training. The associations have also developed forest management guidelines, standards and voluntary codes of conduct which form the basis of certification of their forest areas.

There are, however, many countries, and areas within countries, where timber growers are not organised and hence remain weak. This is the case in countries such as Mozambique and Ethiopia. A glaring gap is the non-existence of stakeholder organisations representing producers of natural

tropical timber in the countries where commercial natural timber logging is still taking place such as Mozambique and Zambia. This is a critical gap if the production of natural timber is to be sustainable and controlled.

4.1.3.4Charcoal producers' associations

The charcoal industry is one of the most important industries in eastern and southern Africa where wood energy is the main source of energy for over 80% of the population. Unfortunately, most of this industry remains in the informal sector and hence the producers are largely not organised. However, there have been attempts to establish charcoal producers' associations in some countries during the last decade. Information on the existence of such associations was given in Kenya, Mozambique and Zambia, but they are either very weak or not yet functional. During the survey, representatives of these associations could not be located. Given that more than 11 million tonnes of charcoal are consumed annually in Africa, and the economic importance of the industry, organisation of stakeholders has a potential to contribute to improved management of forest for sustainable charcoal production and trade.

4.1.3.5Furniture manufacturers association

Whilst furniture manufacturing is an important industry both in the formal and informal sectors in eastern and southern Africa, there are virtually no specific or independent furniture manufacturers' associations in most countries. Most of the furniture manufacturers are members of general manufacturing associations. For example, in Kenya most of the furniture companies are members of the Kenya Manufacturers Association. However there were attempts to establish a small-scale furniture manufacturers' association but this is no longer functional. This sector, however, presents a lot of potential as there are thousands of furniture manufacturers in the region who could benefit from an organisation that looks after their interests, especially improving quality of products to improve their competitiveness and reduce competition and increase synergies among members. Improved organisation could also help them to better access financial resources and help improve the quality of their technology.

4.1.4 Multi-stakeholder organisations

In many countries in the eastern and southern Africa region, some multi-stakeholder institutions have been established to provide platforms for interaction, debate and information sharing among key stakeholders. The most common of these are national forest working groups, community-based natural resources management (CBNRM) forums and multi-stakeholder steering committees (*table 4.4*).

Stakeholder organisations	Examples	Strengths/ membership	Roles
National Forest Working Groups	Ethiopia, Kenya, Uganda, Tanzania	Membership drawn from Govt, NGOs, research, academia, private sector, community associations	Facilitate participation of forestry stakeholders in the forest policy and sector review process as well as development of guidelines/manuals for implementing Forest Acts Platform for interaction and debate among forest stakeholders Undertake thematic studies to provide evidence based advocacy Main body developing forest policy
Professional Forestry Societies/Associations	All countries	Membership drawn from across forestry sector	Represent professional foresters Platform for information sharing and exchange Platform for spearheading research Policy advocacy Sector watchdog NB: Currently weak, due to lack of resources and apathy
Multi-stakeholder steering committees (MSSC)	Zambia, Tanzania, Uganda	Membership drawn from Govt, NGOs, research, academia	Coordinating development and implementation of National forest programmes under the NFP facility

Table 4.4: Multi-stakeholder organisations

		private sector, Representatives from community associations	
African Forest Forum	Continent-wide	Registered NGO Individual membership mainly drawn from African foresters and others interested in the sector	Advice and advocacy Networking among members Development of programmes and projects on priority issues Conduct analysis and research Facilitate information sharing
Community-based Natural Resources Forum	Zambia	Membership, some are registered Others are just networks	National level forum comprising members from CSO, CBOs, govern- ment, research, academia, CBNRM practitioners
Regional CBNRM forums	7 SADC countries		Representatives of national Steering committees of the 7 National CBNRM forums
NGARA (Network for Gums and Resins Research in Africa)		Membership in east and west Africa (gum pro- ducing zone)	Market and trade development Research and development Platform for information exchange and sharing

4.1.4.1 National Forest Working Groups

These are multi-stakeholder forest platforms that were established to facilitate participation of all key stakeholders in national forest policy and development processes. Membership is drawn from government agencies, NGOs, research, academia, private sector and community based organisations. They offer platforms for free interaction and debate between stakeholders, facilitate participation in forest policy review processes and generation of new knowledge through commissioning technical and thematic studies and sharing this between members, as well as disseminating information to the wider public. These working groups are present in all the countries surveyed in eastern Africa. A common characteristic is that they are all hosted by NGOs. For example, the Uganda Forest Working Group was established in 2001 and is hosted by Environmental Alert. It currently has about 60 members (free membership). One of its major achievements was the successful facilitation of participation of stakeholder views in the forest policy review process undertaken between 2001 and 2003 that culminated in the national forest policy and the National Forest and Tree Planting Act of 2003.

The forestry working groups also independently monitor the implementation of the national forest policies and legislation. For example, the Kenya Forest Working Group (established 1994) commissioned independent thematic studies to provide evidence based advocacy material for lobbying for the protection of the Aberdare and Mau forests. The Uganda Forest Working Group successfully lobbied against the degazetting of the Mabira forest. In Ethiopia, the group is working actively to have the status of forestry raised at the federal level from the current level were it is a small section under the Watershed Management Unit.

Strengths and opportunities

The major strengths of the working groups are their free interaction where members contribute as individual experts, the broad range of stakeholders, direct access to policy makers and government and technical knowledge, and having collective resources and capacity to commission research and technical studies to inform their debates and decisions. Although they are informal, they have proved to be very powerful and influential as evidenced by their contributions to-date. Whilst the working groups in eastern Africa are aware of each other's existence, and some have shared some experiences, there is no formal networking between them. There is, however, potential for establishing an East Africa wide network building on these working groups.

4.1.4.2Multi-stakeholder steering committees (MSSC)

A number of countries in eastern and southern Africa are developing and implementing national forest programmes (nfps) with support from the National Programme Facility at FAO in Rome. The term "national forest programmes" is an internationally recognised term that describes the wide range of approaches used in planning, implementing and monitoring forest activities at both national and sub-national levels. Nfps are used as a means to coordinate and guide forest policy development and implementation processes in a participatory and inter-sectoral manner, inte-

grating forests into wider programmes of sustainable land use and socio-economic development. Given the wide range of interests in forest management, and the potential for conflict between different interests and management objectives, it is important to ensure broad based, participatory and inclusive processes in the development and implementation of Nfps.

One of the key strategies that have been used to institutionalise the participation and involvement of all key stakeholders in the planning, implementation, monitoring and evaluation of nfps is the establishment of *multi-stakeholder steering committees* (MSSC). These provide a platform for the members to negotiate a common vision, agenda, roles and objectives. The members are drawn from representatives of government agencies, civic society, academia, research and extension agencies, the private sector, local government and local community institutions. In some countries in eastern Africa, where there are *forestry working groups* with similar membership, MSSCs are a subcommittee of the forestry working groups. This is because MSSCs are project related whereas FWGs are more enduring national fora. In southern Africa, where there are no forest working groups the MSSCs provide an important stakeholder platform for discussing and promoting forestry issues at national level. In some countries, there are attempts to make these more permanent structures beyond the NFP-Facility funded projects.

4.1.4.3 **Professional Forestry Societies/Associations**

Most countries in eastern and southern Africa have professional forest societies/associations. Their membership is drawn primarily from professional foresters (minimum diploma in forestry), although more recently membership has been broadened to include forestry practitioners from other disciplines in some countries. The status of the associations varies, with some being informal networks whilst others, like the Uganda Forestry Association (UFA), are registered as NGOs. The common objectives of these associations are to advance the forest science application in the sector and to contribute to the development of forestry in each country. Unfortunately, almost all the associations in the six countries surveyed, and other countries in the region, are currently very weak or completely inactive. For example, the Professional Foresters Association of Zambia is currently not functional, UFA is not very active and the Forestry Society of Kenya has just been revived in the last two years. A number of factors have been cited for the weak state of professional foresters associations, including:

- Lack of financial resources to fund the activities of the associations;
- Weak national forest sector;
- Undervaluing the importance of science, technical knowledge and know-how in forestry;
- Weak forestry administrations from which the membership was previously anchored;
- Very low commercial forestry development activities in most countries, characterised by a nonvibrant/weak private sector;
- Lack of stringent demands for sustainable forest management standards in the sector;
- Weak membership retention strategies;
- Being overshadowed by other more general disciplines like natural resources and environmenttal management

There is, however, general consensus in the region that the existence of strong professional associations is essential for the long term development and sustainability of forest management in the region. Examples that demonstrate this that were cited during the study include the contribution of technical papers during policy review processes and when there are challenges in the forestry sector. One example was the technical guidelines on *Eucalyptus* species produced by the Forestry Society of Kenya after a minister had condemned all eucalyptus planting and called for their destruction. In southern African countries that have well developed plantation forestry sectors such as South Africa, Zimbabwe and Swaziland, professional forestry associations had major inputs in the development of voluntary codes of conduct and management guidelines for the sector and continue to play a key role in monitoring their implementation and their refinement.

4.1.4.4Special institutions

The **Network for Natural Gums and Resins in Africa** (NGARA) is a network of African producing countries and partners for the sustainable development and marketing of natural gums and resins. The primary focus is on:

- Promoting exchange of information on production, processing and marketing
- Facilitating access to technological development and training
- Promoting links between the primary producers, processors and end users

• Supporting relevant research in the key areas of the sector

Currently only Ethiopia is a country member of this network. The network provides a good example of the beneficial effects of an organisation of stakeholders in the value chain of a key product(s).

PhytoTrade Africa is a non-profit trade association for natural products in southern Africa. It is a membership organisation with members drawn from Botswana, Malawi, Mozambique, Namibia, South Africa, Zambia and Zimbabwe. The role of the association is to support the growth of the natural products industry in southern Africa while ensuring long term sustainability and social equity. This is achieved through:

- Product development
- Market development
- Supply chain development

The association is a member of the International Fair Trade Association (IFAT). This association provides a good model for potential organisation of some stakeholders around major forest products such as timber, furniture, pulp and paper.

4.1.5 Regional organisations and initiatives

4.1.5.1The Southern Africa Development Community (SADC)

SADC was established in 1992. It has 15 member states, namely Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. It has its headquarters in Gaborone, Botswana. The *SADC Protocol on Forestry* (2002) is the over-arching policy framework for future forestry collaboration amongst Member States. Its specific objectives are to:

- Promote the development, conservation and sustainable management and utilisation of all types of forests and trees;
- Promote trade in forest products throughout the Region, in order to alleviate poverty and generate economic opportunities for the peoples of the Region; and
- Achieve effective protection of the environment, and safeguard the interest of both present and future generations.

The current forestry priorities in the Protocol and the associated Forestry Strategy Document include:

- Sustainable natural forests management (supported by GTZ)
- Cross-border fire management
- Climate change especially REDD
- Value addition
- Biodiversity issues as contained in the biodiversity strategy
- Trans-frontier conservation areas
- Watershed forests
- Consultations for international negotiations

SADC has a consultative structure for coordinating and implementing forest programmes in the region. The structure comprises:

1. The Technical Committee of Heads of Forestry. The committee meets once a year to review and plan regional forestry activities and to share experiences. The committee can invite or co-opt other partners, e.g. UN agencies, CGIAR centres and international and regional NGOs and development partners/donors. The main institutions co-opted when necessary are FAO, UNEP, IUCN, WWF and the Southern Alliance for Indigenous Forests (SAFIRE). Decisions from the committee are forwarded to the relevant council of Ministers for endorsement. If the decisions have financial implications, they are forwarded to the SADC Council for approval.

2. The Forestry Stakeholders Forum. This was established in 2008 as a mechanism for broadening the participation of different stakeholders in the work of SADC. The members are drawn from each member country and comprise representatives from government, academia,

NGOs, private sector and communities. The purpose of the forum is to get input from a wide range of stakeholders, other than governments only, on important forestry issues in the region. Examples include:

- Cross border fire management
- > Preparations for various international forest policy dialogues, e.g. UNFF and UNFCC.

The membership of the stakeholder forum to a particular meeting is not fixed but depends on the expertise required for the specific issue to be discussed. The role of the secretariat is to facilitate the meeting and hire consultants where special expertise and advance preparations are required. The main challenge is lack of funding to convene frequent stakeholder forum meetings.

3. International policy dialogue. SADC organises discussion platforms and training for negotiators to secure and establish common SADC positions and approaches to negotiations. SADC's approach to international policy dialogues is to have a common framework for negotiation:

- > Attend continental preparatory meetings, and
- > Organise side consultative SADC meetings during the negotiations
- Generally SADC secretariat has observer status but the member states speak on behalf of the region

There are still gaps that need to be addressed and these include:

- > Support for foresters to participate in negotiations
- > Developing the capacity of member states in forest resources value addition
- Capacity building in managing fire
- > Capacity to facilitate effective information exchange
- How to assess carbon and build the capacity of the region to benefit from carbon markets and payment for environmental services in general

Involvement of NGOs and private sector is through the stakeholder forum. However, individual NGOs that have regional programmes can be accredited by SADC. There have been attempts to formalise relationships with IUCN and WWF but these did not succeeded due to the re-organisation of these international NGOs (mainly the movement of their regional coordinating offices to Nairobi).

Opportunities for collaborating with AFF

Since AFF is accredited at AU level, SADC can deal directly with AFF, and AFF can engage with SADC on the priority areas identified in the SADC Forestry Protocol and forestry strategy. There is also a possibility of having an independent MOU between AFF and SADC. AFF could provide technical support during preparations for various international negotiations. This could include support through preparation of technical papers

Linkages with other sub-regional bodies

SADC has formal linkages with other sub-regional bodies in Africa, especially COMESA, ECOWAS and EAC. However, there have been no specific joint forestry programmes between them. The main forum of exchange on forestry issues at continental level is the African Forestry and Wildlife Commission of FAO.

4.1.5.2The Common Market for Eastern and Southern Africa (COMESA)

COMESA is a regional organisation made up of 19 countries (Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe). It was established in 1994 to replace the Preferential Trade Area (PTA). It has its headquarters in Lusaka, Zambia. The aims and objectives of COMESA are:

- To attain sustainable growth and development of the member States by promoting a more balanced and harmonious development of its production and marketing structures;
- To promote joint development in all fields of economic activity and the joint adoption of macroeconomic policies and programmes;
- To raise the standard of living of its peoples and to foster closer relations among its member States;

- To co-operate in the creation of an enabling environment for foreign, cross-border and domestic investment, including the joint promotion of research and adaptation of science and technology for development;
- To co-operate in the promotion of peace, security and stability among Member States in order to enhance economic development in the region;
- To co-operate in strengthening the relations between the Common Market and the rest of the world and the adoption of common positions in international fora; and,
- To contribute towards the establishment, progress and the realisation of the objectives of the African Economic Community.

COMESA's forestry activities are being implemented under two continental frameworks, namely the Comprehensive Africa Agricultural Development Programme (CAADP) and the Environmental Action Plan (EAP) of the African Union's New Partnership for Africa's Development (AU/NEPAD). The overall goal of CAADP is to "*Help African countries reach a higher path of economic growth through agriculturally-led development, which eliminates hunger, reduces poverty and food insecurity, and enables expansion of exports."* CAADP is a growth-oriented agricultural development agenda, aimed at increasing agricultural growth rates to six percent per year and to create the wealth needed for rural communities and households in Africa to prosper. With the assistance of the African Forest Forum, CAADP has also incorporated forestry as part of its strategy.

The COMESA Forest Strategy aims at achieving the following:

- To improve the productivity of the forestry sector and its real and official contribution to the economy;
- To capture the economic potential of forestry through support to small-scale forest enterprises, investment promotion in value-adding industries, and sustainable forest management;
- To support regional understanding and proactive management of the impacts of expanded trade on forests and local livelihoods through cross-sectoral research and planning, policy harmonisation and regional cooperation;
- To improve policies, planning frameworks and monitoring for sustainable forest management and trade; and,
- To strengthen the capacity of institutions managing and governing forests.

The strategy development was initiated in 2008 and implementation is still in its infancy. It offers immense potential for collaboration with AFF and Swedish Institutions, especially in:

- Improving investment in value addition and strengthening the organisational capacities of small to medium enterprises.
- Supporting exchange of experiences and best practices for sustainable management under different forest management regimes, and formulate principles and guidelines for sustainable forest management.
- Exploring the possibility of developing regional certification and fair trade guidelines for NTFPs and timber (quality standards for production, collection, processing and trade).
- Support the provision of information on markets, giving preferential treatment to markets for fairly traded, certified and organic products.
- Support research into product and market development for products that have promise to capture "win-win" opportunities for enhanced value, local livelihoods and sustainability.
- Invest in the development of a monitoring strategy for the illegal movement of forest products, including a peer review mechanism, and encourage member states to adopt it.

4.1.5.3The East African Community (EAC)

EAC is the regional intergovernmental organisation of the Republics of Burundi, Kenya, Rwanda, Uganda and Tanzania with its Headquarters in Arusha, Tanzania. The Treaty for Establishment of the East African Community was signed on 30th November 1999 and entered into force on 7th July 2000 following its ratification by the Original three Partner States – Kenya, Uganda and Tanzania. Rwanda and Burundi acceded to the EAC Treaty on 18th June 2007 and became full members of the Community with effect from 1st July 2007.

Aims and objectives

• The EAC aims at widening and deepening co-operation of the Partner States in, among others, political, economic and social fields for their mutual benefit.

• The EAC countries established a Customs Union in 2005 and are working towards the establishment of a Common Market in 2010, a Monetary Union by 2012 and thereafter a Political Federation of the East African States.

Goal

The main goal for EAC as an economic and political entity stems from the desire by the governments of the member countries to improve the standard of living of the population through increased competitiveness, value-added production, trade and investment. This is aimed at promoting the sustainable development of the region with a view to creating a prosperous, internationally competitive, secure, stable, and politically united region.

Regional Initiatives

EAC has a number of regional initiatives with forestry components and the most notable is the **Lake Victoria Development Programme.** The Lake Victoria Basin Commission was officially launched on 11 July 2007. It is rolling out the development programmes of the Lake Basin, including safety of navigation, environmental protection and conservation and overall sustainable development of the region. The activities include the management of the Mount Elgon Regional Ecosystem Conservation Programme (MERECP) which embraces parts of Uganda and Kenya. The Lake Victoria Region Water and Sanitation Initiative project is being implemented in partnership with UN-HABITAT. Meanwhile, the Lake Victoria Fisheries Organisation (LVFO) continues to coordinate measures for sustainable utilisation of the fish resources and the reorganisation of the fishing communities in the management and collaborative activities on the fishery of the Lake.

4.2 Swedish institutions and mechanisms

Most of the important stake-holders in forestry in Sweden today are well organised and enjoy a rather high degree of influence over policy processes and legislation that affect variousl aspects of forestry. Naturally, it has not always been so.

Non-Governmental Organisations (NGOs) have played, and continue to play, very important and decisive roles in Swedish forestry. Already in 1883, a *Forestry Association* was formed in Northern Sweden with a membership of forest owners, industrialists and professional foresters. The Association worked for improved management of the forests in Northern Sweden and took very active part in the discussions leading up to the first Forest Act in 1903. A similar Association for Southern Sweden was formed in 1902, and in 1965 the two merged into the *Swedish Forestry Association*. Also the *Forestry Society* started work in Southern Sweden in 1912, but with the mandate to reforest the vast areas of heather moors that were used for grazing, but were originally forest land. This work was very successful and hundreds of thousand of ha of productive forests today are a testimony to the Society's work. The Society itself is today one of the most important Swedish forest management entrepreneurs.

By far the economically most important NGOs have been the **Forest Owners' Associations**, which started to be formed among farmers and other private forest owners all over Sweden in the 1920s. The original aims of these associations were to give strength to farmers when negotiating prices for their wood with industry, and also to provide training to their members in forestry techniques. They employed professional foresters and grew into very important organisations. Many of them later evolved into **Forest Producers' Cooperatives** which started their own industries, mainly sawmills and some other mechanical wood industries. In Southern Sweden, the biggest Cooperative also went into the pulp industry and today runs three of the biggest pulp mills, not only in Sweden, but in the world. Over the years, the Associations and the Cooperatives have merged into four remaining bodies, organising close to 90,000 private forest owners with a total of 6.9 million ha (50% of all privately owned forest land in Sweden) and with substantial forest industries. With their economic and organisational clout, they have played a very strong role in the forest policy and market processes in Sweden.

Other important NGOs that have played, and play, roles are the **Forest Industries Association** (a lobby and negotiating body for all the big forest companies), **labour unions** organising forest and forest industry workers, the **Royal Swedish Academy of Agriculture and Forestry** (KSLA from 1811), and the many environmental NGOs, particularly the **Swedish Society for Nature**

Conservation and **WWF-Sweden**. In addition, there are NGOs for hunters, orienteerers, ornithologists, anglers and others that use forest land and resources and therefore have an interest in the forests.

The above, and a multitude of other, organisations directly associated with the forestry sector of Sweden have played, and continue to play, many and very important roles. They represent different stakeholder groups and, even if they have different mandates and certainly not always are in agreement on how forests shall be managed in detail, often take on lead roles in the consensusbuilding processes when policies and legislation are developed. They lobby and are advocates for their interests both to the public opinion and to politicians, they provide training, advice and other forms of support to their members, they establish and maintain international relations with sister organisations around the world, they provide facts and figures on their mandate areas of concern, etc. They have also significantly contributed to the relative consensus that characterise the Swedish society's view on the forest resources and to the high ethic standards and professionalism that characterise the forest sector in Sweden today.

4.3 Suggested areas for cooperation

In the course of the consultations and analyses done in the context of developing this report, we have initially identified five possible areas for cooperation in the wide field of "organising and empowering stakeholders" between partners in Eastern and/or Southern Africa on the one hand and Swedish and other external partners on the other. When these were presented and discussed at the workshops in Nairobi and Lusaka in April 2010, participants identified one further "stakeholder"-related priority area that was felt suitable for possible collaborative efforts. Naturally, there are an almost unlimited number of urgent activities suitable for various forms of collaboration on issues related to stakeholder strengthening and we may well identify others in the continued work. On the other hand, the purpose of the programme is not to identify *every* possible opportunity for collaboration that can be thought of, but rather a very carefully select number that may realistically be further developed and attract the necessary support to make them feasible to implement.

Thus, in very brief summary, the six areas are described below. The full project proposal concept notes developed around them are found in *Appendix 3*.

1. Empowering producer stakeholders

The potential for individual small- and medium-scale farmers and for rural communities to manage trees and forests for income generation is often limited because of lack of technical knowledge of tree/forest management, limited access to technology and inputs, little understanding of opportunities for value adding and of market chains and mechanisms, and weak organisations to enhance the interests and negotiating powers of the farmers/communities. Likewise, natural resources governance structures and policies are not always amenable for supporting small-scale farmer and community based production.

In Sweden, there is considerable, long and successful experience of building up strong forest owners' associations. This applies to organisational strengths, technical know-how, strong market positions, involvement in secondary value adding industry, and ability to influence policy. Some of this experience could, with relevant adaptation, be applicable also in Africa.

The suggestion is to develop a programme with the aim of empowering forest-based producer stakeholders in E/S Africa through building and strengthening their technical, organisational and marketing capacity in partnerships with relevant Swedish and other institutions.

2. Income generating and poverty alleviating potentials of forest and tree products and services

The forest/tree/wood/NWFPs "sector" has a significant, but little known and largely not quantified, role to play in the economies of African states and their people. Many local and product-specific studies in recent decades consistently show that there is a big income generating and poverty alleviating potential in the production, value adding, transport, trade (both internal and export) and sales of products derived from forests and trees. There are, however, many problems in identifying

and developing these potentials. Apart from a few products and trade/sales items that fall within the "regular" market economy statistics and taxable trade, most forest/tree derived products fall outside official statistics and government control. Much trade is actually illegal, derived from trees and forests which are, in principle, not permitted to harvest or where very unclear tenure rights exist. Another fundamental problem is the fact that we are not really talking about a *sector* in the normal sense. Even where official statistics and information exist on production and trade in some commodities, it is split between the agricultural, transport, energy, tourist, and industry sectors.

Many Swedish and other external institutions and organisations have considerable expertise and experience in supporting entrepreneurs and small-scale commercial initiatives in the forest sector. Such experience includes institutional, technical and economic aspects of business development and management. Partnerships between African and Swedish actors might yield very interesting outcomes – from sharing information and experience to establishing joint enterprises.

The proposal is for an undertaking aiming at identifying the income generating potential of various forest and tree-derived products and services in eastern and southern Africa, and assist in developing mechanisms for enhancing this potential.

3. Strengthening Professional Forest Associations and Societies

In the countries of the E/S African region, **professional forest associations** were established to provide a platform for professional foresters to share scientific knowledge and experiences from practical management of the forest resources in order to improve the management and utilisation of tree and forest resources. This resulted in many forest management challenges and gaps in knowledge being identified and research issues prioritised to address these issues. The growing need to manage forests to meet their multiple functions and roles has brought with it more challenges and therefore the need for well qualified and experienced forestry professionals who can provide sound advice to forest owners and managers on the most appropriate management strategies for the different forests.

Unfortunately, nearly all the professional associations in the region are very weak or not functional. The major challenges they are facing include lack of financial resources, weak organisational capacity, the low importance accorded to forestry in many countries and the limited demand or requirement for application of professional standards in the management of forests in the region.

Thus, the overall aim of this proposal is to revive and build the capacity of professional forest societies in eastern and southern Africa.

4. Improving access to finance for tree growers and small-scale forest enterprises

The major sources of financing for forestry activities in the informal sector are in the form of own savings, reinvestment of profits, and own labour. This has limited the growth and performance of the small-scale forest-based enterprises and reduced their ability to reach their full potential and increase the levels of benefits to those involved in the enterprises. Given that many rural forestry activities are likely to continue to be in the informal sector in the foreseeable future, implementation of SFM in eastern and southern Africa will largely depend on the ability of local communities, rural producers and small-scale forest based enterprises to mobilise resources and invest in their activities.

However, a major problem is that there is very limited access to financial services provided by formal financing institutions. For example, in Tanzania less than 6% of the total population has access to Banks. Some recent developments in Microfinance offer new opportunities for improving access to finance for poor rural communities. Many microfinance institutions have emerged in the region and these include village and mobile banks, savings and credit cooperatives, micro-financing portfolios in postal and commercial banks, and national micro-financing institutions and banks, etc. In addition, partnerships between the formal financial system and micro-financing institutions have helped to improve access to financial resources for small-scale entrepreneurs. Special problems encountered by forestry-based activities, apart from lack of collateral, are the often long time horizons between investment and harvest.

Swedish small-scale tree growers and enterprises have been successful at organising themselves and improving their access to finance. Whilst the macro-economic and other conditions are differrent from the prevailing situation in eastern and southern Africa, it is envisaged that there are opportunities for organised tree and forest producers in the region to learn from the experiences of their Swedish counterparts.

Thus, this proposal aims at undertaking an in-depth assessment of the financial needs, constraints and opportunities for accessing finance for small scale tree growers and forest based enterprises and design strategies for improving their capacity to access finance.

5. Strengthening the capacity of regional stakeholder institutions through linking forest working groups

Each of the three main sub-regional economic communities (EAC, COMESA, SADC) has articulated a forestry agenda that requires active stakeholder participation for its effective development, implementation, monitoring and review. At international level, especially under the UNFF forestry policy processes and dialogue, there is strong interest to promote sub-regional activities and cooperation. Unfortunately, multi-stakeholder platforms that can facilitate the participation of all key stakeholders are still weak and poorly developed. For example, in southern Africa the forest stakeholders' forum is still in its infancy and is run by the SADC secretariat. There is also the regional Community Based Natural Resources Management (CBNRM) forum. In east Africa there is potential to establish strong and effective regional stakeholder institutions for representing forestry stake-holders in regional policy development processes. For example, the National Forest Working Groups (NFWG), which are networks of civil society organisations, government departments, academic and research institutions, in the different countries could be linked to form a regional working group. These platforms, i.e. the CBNRM in S Africa and the NFWGs in E Africa, provide an opportunity for facilitating formal multi-stakeholder interaction with regional policy processes and programmes.

Many Swedish institutions and organisations have considerable expertise and experience in supporting stakeholder representation at national and international level. The suggestion is to develop a programme on how Swedish and other institutions can work with regional institutions and networks aiming at developing and strengthening the capacity of regional forest stakeholder institutions to effectively participate in policy development processes at regional and international levels.

6. Improving medium/large forest industries in the region

The focus in other proposals has been on small-scale, community- and/or farmer-based enterprises and stakeholders. It is also important to acknowledge the role and potential of forest and wood based industries at the medium- and larger-scale levels, both primary industries such as sawmills and board producers, and secondary processing industry such as furniture makers and construction material producers, etc. There is a rapidly growing market for wood products in urban centres and because of rising standards of living, and, as a consequence, a growing interest in restoring old, rundown mills or investing in new ones throughout the region. Some private companies derive their raw material from their own plantations, often on land leased from governments or local communities, some have outgrower arrangements with farmers, and still others buy on the market (which may include from both government and farmer plantations).

There are a number of challenges facing this emerging interest in investing in forest industry. Many companies already operating on the ground and, even more importantly, the potential ones (local as well as foreign), that are attracted by the significant economic potentials that lie in forest industry development in regions where land is available and markets are close and growing, **actually want and need help** to ensure that their investments are technically, economically, socially and environmentally acceptable. This justifies the current proposal which suggest that AFF together with suitable Swedish and other partners launch an analysis aiming at strengthening the ability of relevant stakeholders to realise the potential of forest industry development in E and S Africa.

People and institutions consulted

Name/email	Position/Institution	
Ethiopia		
Abdul Duri, Mr.	Business Development & Operations Executive, Blue Nile Furniture (Fortune Enterprise Plc.), P. O. Box 1525, Addis Ababa	
Alemu Bezahgne, Dr.	Researcher, Forestry Research Centre, Addis Ababa	
	Researcher Forestry Research Centre Addis Ababa	
Belay Gebre Dr	Researcher, Forestry Research Centre, Addis Ababa	
123gebre@gmail.com		
Dechasa, Dr. John	Researcher, Forestry Research Centre, Addis Ababa	
Genene Tesfaye, Dr.	Researcher, Forestry Research Centre, Addis Ababa	
Getachew Demisie, Mr gmfm@ethionet.et, www.gmfm.com.et	General Manager, GM Furniture Manufacturing (GM Pvt. Ltd. Co.), Addis Ababa	
Hussein Kebede, Mr. kebede hussein@yahoo.com	Senior Agronomist, Directorate of Watershed Management, Ministry of Agriculture and Rural Development, Addis Ababa	
Mandere Mulugeta, Dr. Mandere1098@yahoo.com	Researcher, Forestry Research Centre, Addis Ababa	
Melaku Bekele, Prof. <u>Melaku.bekele@wgcf-nr.org</u> bekelemelaku@yahoo.com	Dean, Wondo Genet College of Forestry and Natural Resources, Hawassa University. P. O. Box 128, Shashemene	
Miftah Fekadu, mfkedir@yahoo.co.uk	Researcher, Forestry Research Centre, Addis Ababa	
Seleshi Getahun, Mr. getasil69@yahoo.com	Director of Natural Resources Management Directorate, Ministry of Agriculture and Rural Development, Addis Ababa	
Seyoum Kelemwork, Dr. Seyoum94@yahoo.com Habeaker95@gmail.com	Wood-based Panel boards & Wood anatomy Researcher, Forestry Research Centre, P. O. Box 17618, Addis Ababa	
Shiferaw Alem, Dr.	Researcher, Forestry Research Centre, Addis Ababa	
Sisay Feleke, Dr. sisayfeleke@yahoo.co.uk	Researcher, Forestry Research Centre, Addis Ababa	
Tadesse Wabulem, Dr.	Forestry Research Centre, P. O. Box 17618, Addis Ababa	
Wolde Yohannes Fantu, Dr. woldeyohanesa@yahoo.com	Researcher, Forestry Research Centre, Addis Ababa	
Worku Zewdie, Dr.	Researcher, Forestry Research Centre, Addis Ababa	
Zewdu Eshetu, Dr. Eshetuzevdu@hotmail.com zewdu61@yahoo.com	Director of Watershed Management Unit, Ministry of Agriculture and Rural Development, Addis Ababa	
Kenya		
Andanje, Dr. Samuel sandanje@kws.go.ke	Head Ecosystem and Landscape Conservation, Kenya Wildlife Service, Nairobi	
Chikamai, Dr. Ben director@kefri.org benchikamai@ngara.org	Director General, Kenya Forestry Research Institute (KEFRI)	
Davey, Mr. Finn fdavey.efti@gmail.com	Wajibu MS Company, P. O. Box 612, Village Market, Nairobi	
Etiegni, Prof. Lazare lazetiegni@amatala.org	Professor, Department of Forestry & Wood Science, Moi University, Eldoret	
Imo, Prof. Moses O. imomoses@yahoo.com mosesimo@mu.ac.ke	Professor, Department of Forestry & Wood Science, Moi University, Eldoret	
Kariuki, Mr. Clement nacofak@yahoo.com	Chairman, National Alliance of Community Forest Associations (NACOFA), P. O. Box 12115 – 20100, Nakuru, Kenya	

Kasiki, Mr. Samuel	Deputy Director, Biodiversity Research and Monitoring, Kenya
<u>skasiki@kws.go.ke</u>	Wildlife Service; Nairobi
Khayota, Dr. Beatrice N.	Principal Research Scientist, Centre for Biodiversity, National
<u>bkhayota@hotmail.com</u> ,	Museums of Kenya, Nairobi
pkaviuki@meseums.or.ke	
Kung'u, Prof. James	Chairman, Department of Environmental Sciences, Kenyatta
Kungu.james@ku.ac.ke,	University, Nairobi
kungu kames@yahoo.com	
Mutua, Ms.Wangu	Project Manager, Swedish Cooperative Centre/VI Agroforestry
wangu.mutua@viafp.org	Programme, Kisumu, Kenya
Obango , Mr. John O.	Assistant Manager and Seed Technologist, Kenya Forest Seed
	Centre, P. O. Box 20412-00200, Nairobi
Ogweno, Prof. D.O.	Principal, Kenya Forestry College, Londiani
donogweno@kenyaforestservice.org	
Omollo, Mr. Esau O.	Deputy Director, Forest Conservation and Management, Kenya
emollo@kenyaforestservice.org,	Forest Service, Nairobi
Oyieke, Dr. (Mrs.) Helida A.	Director Research & Collection, National Museums of Kenya, Nairobi
hoyieke@meseums.or.ke,	
Senelwa, Prof. Kingiri	Professor, Department of Forestry & Wood Science,
ksenelwa@yahoo.co.uk,	Moi University, Eldoret
ksenelwas@mu.ac.ke	

Uganda

Amumpe, Mr. Allan	Project Manger, Saw Log Production Scheme, EC Forestry
Byarugaba, Mr. S. R.	ADB Farm Income Enhancement Project (FSSD), Ministry of Water and Environment, Kampala
Eilu, Dr. Gerald	Deputy Dean, Faculty of Forestry & Nature Conservation, Makerere
eilu@forest.mak.ac.ug	University, Kampala
eilug@vahoo.com	
Erivo, Hon, Jessica	Minister of State for Environment, Ministry of Water and
jeriyo@parliament.go.ug	Environment, MP - Adjumani District
jeriyo@yahoo.com	
Kaboggoza Dr. John B S	Department of Forest Products Engineering Makerere University
kaboggoza@forest ma ac ug	Kampala
ikaboggoza@mail.com	Kanipala
Kiweyo Mr. Potor	Donuty Director, National Forestry Research Institute (NAFORI)
	Mukono
Kiwuso, Dr. Peter	Senior Research Officer, NFA- Uganda
Mugabi, Dr. Paul	Lecturer, Wood Processing & Utilisation, Faculty of Forestry &
mugabi@forest.ma.ac.ug	Nature Conservation, Makerere University, Kampala
pkmugabi@yahoo.com	
Mugumya, Mr. Xavier	In charge of REDD and Country Climate Change/CBD negotiator,
xavierm@nfa.org.ug,	NFA, Uganda
Xavier 1962@yahoo.com	
Musoke, Mr. David	Managing Director, Musoke and Associates (Tree Grower), P.O. Box
musokedavid@hotmail.com	16514, Wandegeya, Kampala
Nabanyunya, Mr. Robert	Chairman Uganda Timber Growers Association (UTGA) NFA, Uganda
RobertNabanyunya@yahoo.com	
nabanyumya@yahoo.com	
Nakyeyune, Ms. Annet	Executive Secretary, Uganda Wildlife Society (UWS), P. O. Box
a.nakyeyune@uws.or.ug,	7422, Kampala
Nalwadda, Ms. Celia	Plantation Officer, Saw Log Production Grant Scheme, EC Forestry
info@sawlog.ug	Programme, P. O. Box 5244, Kampala
Nantongo, Ms. Christine	Executive Director, Environmental Alert, Kampala, Uganda
cnantongo@envalert.org	
Ocailap, Mr. Patrick,	Director Budget, Ministry of Finance, Planning and Economic
Patrick.ocailap@finance.go.ug	Development, Republic of Uganda, P. O. Box 8147, Kampala
Okoth, Dr. Sylvance O.	Deputy Regional Coordinator, IUCEA/VICRES Programme, Inter
s.okotho@vicres.net sokotho@gmail.com	University Council of East Africa, Uganda
Ssabaganzi, Ms. Rebecca	District Natural Resources Officer, Wakisu, Uganda
Rssabaganzi61@gmail.oom	
Tumwebaze, Ms. Susan Balaba	Researcher, Makerere University, Kampala
tumwebaze@forest.mak.ac.ug	
Tunyahabure, Nelson	Researcher, Makerere University, Kampala
tunyahabure@forest.mak.ac.ug	
Zake, Mr. Joshua	Senior Programme Officer, Environmental Alert, Kampala, Uganda
izake@envalert.org	, , . , . , . <u>, . , . , . , . , .</u>
	T
---	---
	Tanzania
Akida, Ms. Amina	Statistics Officer, FBD, Dar es Salaam, Tanzania
Gillah, Prof. Peter R.	Dean, Faculty of Forestry Nature Conservation, SUA
prgillah@suanet.ac.tz	Morogoro, Tanzania
forestry@suanet.ac.tz	
Kigula Mr. Joseph Johnson	Extension and Participatory Forest Management Officer FBD, Dar es
Kilahama Dr Folician	Director, Tanzania Ministry of Natural Posources and Tourism
	Forestry and Beekeeping Division, DSM
Luwuge, Ms. Bettie bluwuge@gmail.com	Programme Officer, MJUMITA
Lyimo, Mr. Leonard	Forest Products/Utilization Officer, FBD
Machoke Mr. Chacha	Officer Tanzania Tree Seed Agency
cmachoke@yahoo.com/hotmail.com	Morogoro, Tanzania
Meshack, Mr. Charles	Executive Director, Tanzania Forest Conservation Group
Mgoo Mr Juma	Principal Forestry Officer (Planning) Forestry and Beekeening
ismgoo@hotmail.com	Division, Dar es Salaam, Tanzania
jsmgoo@gmail.com	
Mkamba, Mrs. Gladness A.	Assistant Director, Forestry and Beekeeping Division (FBD), Dar es
Mohamed, Dr. Rose Anne	Principal Agricultural Officer, Ministry Agriculture, Food Security &
roseanne.mohamed@kilimo.go.tz	Cooperatives, Plant Health Unit, Dar es Salaam, Tanzania
Msanga, Mr. Heriel P	Chief Executive Tanzania Tree Seed Agency
ttsa@morogoro.net	Morogoro, Tanzania
hpmsanga@hotmail.com	
Ndossi, Mr. Emmanuel	Natural Resources Programme Officer, Wildlife Conservation Society
Nshubemuki, Dr. Ladislaus	Director, Tanzania Forestry Research Institute (TAFORI)
tafori@morogoro.org	Morogoro, Tanzania
ntamubano, Ms. Wivine	Principal Environment and Natural Resources Officer, East African
Nyit, Mr. Paulo	Secretary General, Wildlife Conservation Society
Sianga Mr. Cassian	Executive Director, Tanzania Natural Resources Forum: Forest
c.sianga@tnrf.org	Working Group
Tangwa, Mr. Jonathan	Senior Forest Officer (Research and Training), Forestry and Beekeeping Division
Wambura, Mr. Matiko	Forest Products/Utilization Officer, FBD
jnmatiko@hotmail.com	Dar es Salaam, Tanzania
	Zambia
Banda, Mr. Richard	Vice Principal, Zambia College of Forestry, Mwekera
Chiiba, Mr. Victor	Senior Extension Officer, Forest Department, Ministry of Tourism.
Vickman80@yahoo.com,	Environment and Natural Resources, Lusaka
Chisheta Mr Mwenya	Economist Industrial Evaluations Ministry of Commerce Trade and
mwenyachisheta@vahoo.co.uk	Industry. Lusaka
Gumbo, Dr. Davidson J.	Regional Scientist, CIFOR, Lusaka, Zambia
<u>d.gumbo@cgiar.org</u>	
Kangwa, Dr. John Makumba	Head, Department of Forest Resources Management, School of
john.kangwa@cbu.ac.zm,	Natural Resources, Copperbelt University, Kitwe, Zambia
<u>Kangwa@yanoo.com</u>	Vice Dean School of Natural Recourses, Connerholt University
Robby.kasubika@cbu.ac.zm	Kitwe
Katongo, Mr. Boston L.	Project Coordinator UNDP/ECZ Project , Environmental Council of
bkatongo@necz.org.zm ,	Zambia, Lusaka
Kakwe Mr Misael	Environment Mainstreaming Advisor Ministry of Tourism
mkokwe@mtenr.gov.zm	Environment and Natural Resources (MTENR), Lusaka
misaelkk@zamnet.zm	
Madzara, Ms. Anne M.	Executive Director, Sustainable Tourism Enterprises Promotion for
madzara@powerconnect.co.zw	Local Communities, Zambia

Makumba, Mr. Ignatius N.	Chief Natural Resources Management Officer, Environment and
inmakumba@yahoo.com	Natural Resources Management Department, Ministry of Tourism,
	Environment and Natural Resources, Lusaka, Zambia
Malala, Mr. Francis	Chairman, Timber Producers Association of Zambia
<u>fskmalala@yahoo.com</u>	
Masange, Mr. Charles	Secretary General, Timber Producers Association of Zambia
<u>chmasanga@yahoo.com</u>	
Matakala, Prof. Patrick W.	Country Director, WWF Zambia Country Office, Lusaka, Zambia
<u>pmatakala@wwfzam.orq</u>	
Msimuko , Mr. John	Executive Director, Keepers Zambia Foundation, Lusaka, Zambia
<u>jmsimuko@mail.zamtel.zm</u>	
Mulenga, Mr. Fredrick	Principal, Mwekera Forestry College, Private Bag, Ndola, Zambia
mulengaf1959@gmail.com	
Musonda, Mr. Godfrey	Provincial Forest Officer, Copper Belt, P. O. Box 70228, Ndola,
godfrey musonda@yahoo.com	Zambia
Mwiita , Dr. Jacob	Dean, School of Natural Resources, Copperbelt University, Kitwe
<u>Jacob.mwiita@cbu.ac.zm</u>	
Ngandwe, Dr. Philemon	Wood Science at Copperbelt University, Kitwe
Nguvulu Ms. Catherine Z.	Acting Principal Research Officer, Forest Research Division, FD,
<u>cnguvulu@yahoo.co.uk</u>	Lusaka
Nshingo, Mr. Cosmas	Plantations Manager, Zambia Forestry and Forest Industries
zaffico@kitwemicrolink.zm	Corporation Ltd. (ZAFFICO), Ndola, Zambia
Nyambe, Dr. Nyambe	Project Coordinator, Community Centred Conservation and
nnyambe@wwfzam.org	Development Project, WWF, Lusaka, Zambia
Siampale, Mr. Abel	Senior GIS Technical Officer, Forestry Department, Lusaka
Abel.siampale@gmail.com	
Sichilongo, Mr. Mwape	Coordinator, Zambia Community Based Natural Resources
<u>mwapesichilongo@yahoo.co.uk</u>	Management Forum, Lusaka, Zambia
Simpale, Mr. Abel M.	Forester, FMGT
Abel.simpale@gmail.com	
Tombo, Mr. Deviness	Acting Chief Research Officer, Forest Research Division, FD, Lusaka
devinesstombo@gmail.com	

Mozambique

Catarino, Mr. Jose	UNAL Association
<u>catarino@yahoo.com</u>	
Cuco , Mr. Arlito	Managing Director, Green Resources Ltd., Mozambique
Arlito.cuco@greenresources.no	
da Silva Amosse, Ms. Olivia Susana	Head of Forestry and Wildlife Department in Maputo Province
olisuzysilva@yahoo.com.br	
da Silva, Mr. Andre Augusto	Green Resources Mozambique SA
andredasilva@greenresources.no	
de Saisa , Ms. Camila	Official at Forest Research Centre Directorate of Agriculture and
Causa.camila9@gmail.com	Nature Resources, Mozambique
Foloma, Mr Marcelino	Forest Department, Eduardo Mondlane University, Maputo
Laves, Mr. Teles	Forestry Programme Coordinator, Directorate of Agriculture and
tealves@gmail.com	Natural Resources
Mabunda, Mr. Rito	Forest Programme Coordinator, WWF Mozambique
ritomabunda@wwf.org.mz	
wwfmoz@wwf.org.oz	
Mate, Ms. Rosta	IUCN Association
ROSTAMATE@GMAIL.COM	
Nair, Mr. Mohan	Director Finance/Business Development, Malonda Foundation
<u>Mohan.nair@malonda.co.mz</u>	
Nhancale, Mr. Camilo	President of the Board, Youth Development and Environment NGO
<u>caconha@yahoo.com</u>	
<u>caconha@tdm.co.mz</u>	
Nube, Ms. Teresa	DNTF Association
<u>teresanube@yahoo.com.br</u>	
Oreste, Mr. Mandrate Nakala	Deputy National Director, National Directorate of Lands and Forests,
mandrateoreste@yahoo.com.br	Ministry of Agriculture, Mozambique
<u>mnakala@tdm.co.mz</u>	
Salomae, Ms. Alda	Executive Director, Central Terra Viva, Maputo
<u>asalomao@tvcabo.co.mz</u>	
Sitoe, Dr. Almeida	Ag. Dean and Ad. Head of Department, Eduardo Mondlane
almeidasitoe@gmail.com	University, Maputo
Tankan, Mr. Issufo	Central Terra Viva Association
issutotankar@gmail.com	

Taquidir, Mrs Alima	Forest Department, Eduardo Mondlane University, Maputo
	Sweden
Ackzell, Dr. Lennart	Senior Advisor International Affairs, Forestry Division
Lennart.ackzell@lrf.se	Federation of Swedish Farmers, Stockholm
Alemu Mekonnen, Dr.	Coordinator and Research Fellow EfD, Environmental Economics Policy Forum for Ethiopia (EEPEE), Ethiopian Development Research
Alema m200+@yanoo.com	Institute (EDRI)
Andrén, Prof. Olof	Professor Soil Biology, Dept. of Soil and Environment, SLU, Uppsala
Axelsson, Dr. Anna-Lena	Head of Unit, Dept. of Forest Resources Management, SLU, Umeå
Anna-lena.axelsson@srh.slu.se	
Pia.barklund@mykopat.slu.se	Associate Professor, Dept. of Forest Mycology and Pathology, SLU, Uppsala
Barklund, Mr. Åke	Managing Director and Secretary General, Royal Swedish Academy
aake.barklund@ksla.se Bengtsson, Mr. Klas	of Agriculture and Forestry (KSLA), Stockholm Managing Director, SSC Forestry (Svensk Skogs-Certifiering AB)
Klas.bengtsson@ssc-forestry.com	Uppsala
Björkman, Mr. Per	Coordinator, The Forest Initiative (Skogen/Sida), Stockholm
Blombäck, Mr. Peter	Head International Division, Swedish Forest Agency, Jönköping
Peter.blomback@forestagency.se	Scientific Programme Coordinator International Foundation for
Linley.chiwona.karltun@ifs.se	Science (IFS), Stockholm
Egberth, Dr. Mikael	GIS Specialist, Dept. of Forest Resources Management, SLU, Umeå
Forshed, Dr. Olle	Researcher Tropical Forest Management, Dept. of Forest Ecology
Olle.forshed@ssko.slu.se	and Management, SLU, Umeå
Magnus.fridh@skogsstyrelsen.se	Head Analysis Division, Swedish Forest Agency, Jonkoping
Fryk, Dr. Jan	Managing Director, Swedish Forestry Research Institute, Skogforsk,
Hailemariam Teklewold, Mr.	Ph.D. Student EfD
Hailemariam.teklewold@economics.gu.se	Department of Economics, Göteborg University
Hall, Dr. Richard Richard.hall@ifs.se	Deputy Director and Scientific Programme Coordinator International Foundation for Science (IFS), Stockholm
Hånell, Prof. Björn	Professor, Dept. of Forest Ecology and Management, SLU, Umeå
Hedlund, Dr. Linda	Director and Head of Forestry Division, Federation of Swedish
Linda.hedlund@lrf.se	Farmers, Stockholm
Hellmark, Ms. Ida Ida.hellmark@economics.gu.se	focall network, Department of Economics, Gothenburg University
Hensbergen, Dr. Hubertus (Berty) van	Managing Director; Wildhorus Ltd., Kent, UK
<u>berty@wildhorus.co.uk</u> Hovmöller, Mr. Henrik	Manager Data Bases and Statistics, International Foundation for
Henrik.hovmoller@ifs.se	Science (IFS), Stockholm
Ilstedt, Dr. Bruno Ulrik.ilstedt@sek.slu.se	Assistant Professor, Dept. of Forest Ecology and Management, SLU, Umeå
Joel, Dr. Abraham	Dept. of Soil and Environment, SLU, Uppsala
<u>Abraham.joel@mark.slu.se</u> Karltun. Dr. Frik	Associate Professor Soil Science Dept. of Soil and Environment
Erik.karltun@mark.slu.se	SLU, Uppsala
Kassie, Mr. Menate	Research Officer EfD, Department of Economics, Göteborg
Kjellqvist, Dr. Tomas	Head of Research Policy Unit, Sida, Stockholm
Tomas.kjellqvist@sida.se Köhlin, Dr. Gunnar	Associate Professor, Director Environment for Development
Gunnar.kohlin@economics.gu.se	Initiative, Department of Economics, Gothenburg University
Liden, Ms. Gunilla gunilla@forestry.se	Project Officer, The Forest Initiative (Skogen/Sida), Stockholm
Malmer, Prof. Anders	Deputy Head of Department, Dept. of Forest Ecology and
Anders.malmer@sek.slu.se	Management, SLU, Umeă Research Fellow CEMARE, University of Portsmouth UK
Mintewab.bezabih@port.ac.uk	Research Associate EfD Centre Ethiopia
Nyangena, Dr. Wilfred	Coordinator and Research Fellow EfD, Kenya Institute for Public Policy Research and Analysis (KIPPPA) and the School of
wity angena (with pratorice	Economics, Univ. of Nairobi

Nyberg, Dr. Gert	Department of Forest Ecology and Management SLU
<u>Gert.nyberg@sek.slu.se</u>	Coordinator Agri4D network, SLU, Umeå
Olsson, Prof. Mats	Professor, Dept. of Soil and Environment, SLU, Uppsala
<u>Mats.olsson@mark.slu.se</u>	
Peichen, Prof. Gong	Professor, Dept. of Forest Economics, SLU, Umeå
Peichen.gong@sekon.slu.se	
Rosén, Dr. Kaj	Deputy Director, Swedish Forestry Research Institute, Skogforsk,
Kaj.rosen@skogforsk.se	Uppsala
Sandewall, Dr. Mats	Coordinator International Research Cooperation, Dept. of Forest
<u>Mats.sandewall@srh.slu.se</u>	Resources Management, SLU, Umeå
Sjögren, Dr. Hans	Research Assistant, Dept. of Forest Ecology and Management, SLU,
<u>Hans.sjogren@ssko.slu.se</u>	Umeå
Staland, Mr. Peter	Head of Forest Policy Unit, Forestry Division, Federation of Swedish
Peter.staland@lrf.se	Farmers, Stockholm
Toborn, Mr. Johan	Senior Adviser, International Secretariat, SLU, Uppsala
<u>Johan.toborn@adm.slu.se</u>	
Tosterud, Mr. Anders	Consultant
anders@tosterud.se	
Wagura, Mr. Simon	Ph.D. Student EfD, Department of Economics, Gothenburg
Simon.wagura@economics.gu.se	University
Westholm, Ms. Lisa	focali network, Department of Economics, Gothenburg University
Lisa.westholm@economics@gu.se	
Wirtén, Mr. Håkan	Deputy Director General, Swedish Forest Agency, Jönköping
hakan.wirten@skogsstyrelsen.se	
Zenebe Gebreegziabher, Dr.	Postdoctoral Fellow EfD Ethiopia, Environmental Economics Policy
Zenebeg2002@yahoo.com	Forum for Ethiopia (EEPFE), Ethiopian Development Research
	Institute (EDRI)

Appendix 2.

Programme and participants Nairobi

Programme

Workshop in Nairobi 20-22 April 2010

"African-Swedish collaboration programme on Sustainable Forest Management"

Organisers: African Forest Forum Royal Swedish Academy of Agriculture and Forestry

Venue: Jacaranda Hotel, Westlands, Nairobi

The **main purposes** of the workshop are:

- To *present the background document* on potential areas of collaboration on SFM. This has been prepared by a team of AFF/KSLA experts through wide-ranging consultations in Eastern and Southern Africa and in Sweden since early 2009. The conceptual basis for the work was laid in the course of the project "Sustainable Forest Management in Africa" 2002-2008.
- To **analyse and discuss the suggestions** made in the document, as well as other proposals that participants may put forward, on concrete fields suitable for collabora-tion between African, Swedish and other partners.
- To *identify priority areas of collaboration* which merit development by AFF and KSLA into full scale and fundable proposals in the remaining part of the planning phase of the programme, i.e. until December 2010.

Day/time		Programme points
Tuesday 20/4	08.00	Registration of participants
	09.00	Opening, welcome and short presentations of organisers/sponsors
		 African Forest Forum; Mr. Macarthy F. Oyebo, President Governing Council Royal Swedish Academy of Agriculture and Forestry, Dr. Bjorn Lundgren, on behalf of Managing Director and Permanent Secretary Swedish International Development Cooperation Agency; Ms. Kikki Nordin, Head Regional Team for Environment and Economic Development Official opening, Dr. Alice Kaudia, Environment Secretary, Ministry of Environment and Mineral Resources, Kenya
10.0	00 - 17.30	Presentation sessions
		Co-Chairs: Dr. Alice Kaudia and Prof Godwin Kowero Rapporteurs: Dr. Larwanou Mahamane and Dr. Yonas Yemshaw , AAF
	10.00	"Lessons learnt on developing SFM in Sweden – relevance to Africa" – the background of the programme, activities to date, and expected follow up. Dr. Bjorn Lundgren, KSLA and AFF
	10.45	Coffee break
	11.15	"Processes and mechanisms of developing forest policies, and legislation and institutions to implement such policies" – analysis of situation, needs and opportunities in Eastern Africa, and suggestions for collaborative interventions. Prof. Fredrick Owino , AFF
	12.15	Lunch
	13.15	"Strengthening Africa's technical and institutional capacity to support SFM" – analysis of situation, needs and opportunities in Eastern Africa, and suggestions for collaborative interventions. Prof. Romanus Ishengoma, Sokoine University
	14.15	"Organising and empowering stakeholders in the management and use of forest and tree resources" – analysis of situation, needs and opportunities in Eastern Africa, and suggestions for collaborative interventions. Mr. Peter Gondo, AFF
	15.15	Coffee break

PROGRAMME

	15.45	Short (5-10 minutes each) presentations of various relevant programmes and institutions, e.g.:
		 FAO's regional forest work; Mr. Foday Bojang and Mr. Mafa Chipeta Forest certification; Mr. Klas Bengtsson
	17.00	Round up of the day's presentations and dividing participants into working groups
Wednesday 21/4	08.00	 African Union's views on forests; Mr. Almami Dampha Environment for Development and focali networks; Dr. Gunnar Kohlin, Dr. Wilfred Nyagena The Forest Initiative, Dr. Gunnar Kohlin (for Mr. Per Bjorkman) The ANAFE network; Dr. Aissétou Yayé The United Nations Forum on Forests (UNFF); Ms. Afsa Kemitale WWF E/S Africa, Dr. John Salehe The World Agroforestry Centre, Prof. August Temu Swedish University of Agricultural Sciences (SLU), Dr. Bjorn Lundgren
	10.00	Three Working Groups:
		1. "Processes and mechanisms of developing forest policies, and legislation and institutions to implement such policies"
		Chair: Mr. Macarthy F. Oyebo Resource person: Prof. Fredrick Owino Rapporteur: Prof. John Kabogozza
		 Among proposals to discuss are: Analyses of regional/trans-boundary forest issues Strengthening capacities to implement NFP-derived plans Analyses of land and tree tenure issues as constraints and opportunities in achieving SFM
		2. "Strengthening Africa's technical and institutional capacity to support SFM"
		Chair: Dr. Ben Chikamai Resource person: Prof. Romanus Ishengoma Rapporteur: Dr. Gorettie Nabanoga
		 Among proposals to discuss are: Inventory and monitoring of forest, wood and NWFP resources Strengthening of forest research Building up Forest Certification capacity in Africa Analysing the need for improved technical level forestry training in E Africa Facilitating the up-grading of tree seed and germplasm improvement work in the region
		3. "Organising and empowering stakeholders in the management and use of forest and tree resources"
		Chair: Ms. Christine Nantongo Resource person: Mr. Peter Gondo Rapporteur: Prof. Philip Nyeko
		 Among proposals to discuss are: Empowering producer stakeholders Income generating and poverty alleviating potentials of forests and trees
	19.00	Reception at Jacaranda Hotel
Thursday 22/4	08.00 -16.00	Co-chairs: Prof. Godwin Kowero , AFF, and Dr. Bjorn Lundgren , KSLA Resource persons Prof. F. Owino , Prof. R. Ishengoma and Mr. P. Gondo Rapporteurs: Dr. Dr. Larwanou Mahamane and Dr. Yonas

	Yemshaw, AAF Presentations/discussions of the three Working Groups' conclusions and decisions on priorities
09.00	Working Group No. 1
10.00	Working Group No. 2
11.00	Coffee break
11.30	Working Group No. 3
12.30	Lunch
14.00	Discussing and deciding about which priority programme/activity proposals shall be further developed by AFF/KSLA
16.00	Concluding and summing up the workshop; Prof. Godwin Kowero and Dr. Bjorn Lundgren Where do we go from here? Dr. Bjorn Lundgren , KSLA and AFF



Participants in Nairobi workshop. The two ladies in the middle front row are Ms. Kikki Nordin from the Swedish Embassy and Dr. Alice Kaudia, Environment Secretary, Govt. of Kenya, who opened the workshop.

Participants Nairobi 20-22/4/10	
Name/email	Position/Institution/Address
Bengtsson, Mr. Klas Klas.bengtsson@ssc-forestry.com	Managing Director, SSC Forestry (Svensk Skogs-Certifiering AB); P.O. Box 75311, Uppsala, Sweden Tel:+46 18 15 00 02
Bojang, Mr. Foday Foday.bojang@fao.org	Senior Forestry Officer, FAO Regional Office for Africa; Member AFF GC; P.O. Box GP 1628, Accra, Ghana Tel:+233 21 765 000
Chikamai, Dr. Ben director@kefri.org benchikamai@ngara.org	Director, Kenya Forest Research Institute (KEFRI) P.O. Box 20412-00200, Nairobi, Kenya Tel:+254 722 756 483
Chipeta, Mr. Mafa E. Mafa.chipeta@fao.org	FAO Subregional Coordinator for Eastern Africa P.O. Box 5536, Addis Ababa, Ethiopia Tel:+251 911 20 21 91
Dampha, Mr. Almami damphaA@africa-union.org	Policy Officer, Forestry and Land Management, African Union Commission; Observer AFF GC; P.O. Box 3243, Addis Ababa, Ethiopia <u>Tel:+251</u> 912 03 57 13
Figueiredo, Mr. Pedro de pedro.de-figueiredo@ foreign.ministry.se	Senior Programme Officer, Sida Regional Programme Manager for Agriculture, Swedish Embassy; P.O. Box 30600-00100, Nairobi, Kenya <u>Tel:+254</u> 020 423 4000
Gondo, Mr. Peter peter@safire.co.zw	Deputy Director, Southern Alliance for Indigenous Resources (SAFIRE); Member AFF GC, P.O. Box 398 Belverdere, Harare, Zimbabwe <u>Tel:+263</u> 4 794 333
Guthiga, Dr. Paul pguthiga@kippra.or.ke	Researcher, Environment for Development (EfD) project, Kenya Institute for Public Policy Research and Analysis (KIPPRA) P.O. Box 46579-00100, Nairobi, Kenya Tel:+254 725 58 73 81
Hensbergen, Dr. Hubertus van berty@wildhorus.co.uk	Chairman SSC Forestry; Managing Director Wildhorus Ltd., The old Rectory, Maidstone Road, Nettlestead, Maidstone ME18 5EZ, Kent, UK
Ishengoma, Prof. Romanus ishengomarc@yahoo.com	Professor/Consultant, Sokoine University of Agriculture; P.O. Box 3009, Morogoro, Tanzania Tel:+255 23 260 16 74
Kaboggoza, Prof. John R. S. kaboggoza@forest.mak.ac.ug jkaboggoza@gmail.com	Professor, Faculty of Forestry and Nature Conservation, Makerere University P.O. Box 7062, Kampala, Uganda Tel:+256 772 82 68 44
Kariuki, Mr. Clement nacofak@yahoo.com	Chairman, National Alliance of Community Forest Associations (NACoFA); P.O. Box 12115-20100, Nakuru, Kenya Tel:+254 722 39 30 17
Kassie, Mr. Menate Menate.kassie@economics.gu.se	Research Officer, Department of Economics, University of Gothenburg P.O. Box 640, SE 405 30 Gothenburg, Sweden Tel: +46 31 7866391
Kaudia, Dr. Alice Alice.kaudia@gmail.com	Environment Secretary, Ministry of Environment and Mineral Resources; P.O. Box 30126-00100, Nairobi, Kenya Tel:+254 722 76 29 27
Kemitale, Ms. Afsa Kemitale@un.org	Forest Affairs Officer, UNFF One UN Plaza DCI -256; New York, N.Y 10044, USA Tel:+212 963 44 37
Kjellstrom, Dr. Claes Claes.kjallstrom@foreign.ministry.se	Policy Specialist Research, Swedish Embassy; P.O. Box 30600-00100, Nairobi, Kenya Tel:+254 020 423 4000
Köhlin, Dr. Gunnar Gunnar.kohlin@economics.gu.se	Associate Professor and Director Environment for Development Initiative, Univ. of Gothenburg P.O. Box 640, SE 405 30 Gothenburg, Sweden <u>Tel:+46</u> 70 53 50 50 8
Kowero, Prof. Godwin g.kowero@cgiar.org	Executive Secretary, African Forest Forum c/o ICRAF, P.O Box 30677-00100, Nairobi, Kenya

	<u>Tel:+254</u> 020 722 4200 Ext 4203
Kung´u, Prof. James B.	Chairman/Associate Professor, Department of Environmen-tal
Kungu.james@ku.ac.ke	Sciences, Kenyatta University
Kungu_james@yahoo.com	P.O. Box 43844-00100, Nairobi, Kenya
	<u>Tel:+254</u> 020 871 1622
Kyaroki, Mr. Ambrose	President, Uganda Forest Association
Ug_for_assoc@yahoo.com	P.O. Box 27667, Kampala, Uganda
	<u>Tel: +256 77</u> 24 96 517
Larwanou, Dr. Mahamane	Senior Programme Officer, African Forest Forum
m.larwanoiu@cgiar.org	c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya
	<u>Tel:+254</u> 20 7224000 Ext 4624
Lubembe, Ms. Everlyn	Finance and Administrative Assistant, African Forest Forum
e.lubembe@cgiar.org	c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya
	<u>Tel:+254</u> 20 7224000 Ext 4150
Lundgren, Dr. Björn	Chairman KSLA Committee for International Forest Issues;
Bjorn.lundgren@ekman.se	Member AFF GC
	Tengdahlsgatan 49, SE-16647 Stockholm, Sweden
	1el: +46 8 6436885
Luukkanen, Prof Olavi	Professor, University of Helsinki and Director, Vikki Tropical
Olavi.luukkanen@helsinki.fi	Resources Institute
	P.O Box 27, 00014 University of Helsinki, Helsinki, Finland
	<u>Iel:+358</u> 9 19 15 86 43
Machena, Dr. Cecil	Programme Manager, CAMPFIRE Association
campfire@ecoweb.co.zw	P.O. Box 664, Harare, Zimbabwe
Messay, Mr. Sintayehu Beshah	Team Leader, Communications and Networking Focal person,
masealem@gmail.com	Forest Policy Issues, Forum for Environment (FFE)
	P.O BOX 10386, Addis Adada, Ethiopia
Moning Ma Marta	Tel:+ 251 911 40 30 94 Decience Forest Coordinator, IUCN Factors & Southern Africa
Monjane, Ms. Marta	Regional Forest Coordinator, TOCN Eastern & Southern Arrica
Marta.monjane@iuch.org	r_{ol} , $\pm 254.20,240.3561/65/70$
Mutua Mc Wangu	Project Manager Swedich Cooperative Contro/VI Agro-forestry
	Programme
wangu.matua@viaip.org	P O Box 3160 Kisumu Kenya
	T_{el} + 254 057 20 22 047/722 288 940
Nabanoga Dr. Gorettie	Dean Eaculty of Forestry and Nature Conservation Makerere
dean@forest.mak.ac.ug	University
nabanoga@forest.mak.ac.ug	P.O. Box 7062, Kampala, Uganda
	Tel : +256 772 52 04 04/414 591 751
Nantongo, Ms. Christine	Executive Director, Environmental Alert (hosting Uganda Forest
cnantongo@envalert.org	Working Group), Member AFF GC;
	P.O. Box 11259, Kampala, Uganda
Nordin, Ms. Kikki	Director, Regional Team for Environment and Economic
kikki.nordin@foreign.ministry.se	Development (REED), Swedish Embassy
	P.O. Box 30600-00100, Nairobi, Kenya
	<u>Tel:+254</u> 020 423 40 00/64
Nyagena, Dr. Wilfred	Coordinator, Kenya Institute for Public Policy Research and
wnyagena@kippra.or.ke	Analysis (KIPPRA)
	P.O. Box 56445-00200, Nairobi, Kenya
	<u>1el:+254</u> 020 2/1 99 33/4
Nyeko, Prot. Philip	Associate Professor, Makere University, and Member of Executive
nyeko@forest.mak.ac.ug	Committee, Uganda Timber Growers' Association (UTGA)
	P.O. Box 7062, Kampala, Uganda
Quine Brof Fredrick	Managing Director, Forget Resources International (FORIN)
forin@kenvaweb.com	Member AFE GC
<u>Ionn@kenyaweb.com</u>	P O Box 13762 Nairohi Kenya
	$T_{el} + 254 722 488 721$
Ovebo , Mr. Macarthy Afolabi	Chairman of the Governing Council, African Forest Forum
maoyebo@yahoo.co.uk	3 Daniel Arap Moi Close, Asokoro, Abuja, Nigeria
,	Tel:+234 80 37 87 48 05/+234 80 59 64 99 51
Salehe, Mr. John	Forestry Advisor, WWF Regional Programme Office
jsalehe@wwfearpo.org	P.O. Box 62440-00200, Nairobi, Kenva
	Tel:+254 723 78 61 88
Seyoum Kelemwork, Dr.	Researcher, Forest Research Centre (EARO)
seyoumg@yahoo.com	P.O. Box 17618, Addis Ababa, Ethiopia
	<u>Tel:+251</u> 0911 14 7434
Sianga, Mr. Cassian	Coordinator, Tanzania Forest Working Group, Tanzania National
a signagether are	Resource Forum

	P.O. Box 10011, Arusha, Tanzania
	<u>1el:+255</u> 756 960 496
Sjöholm, Mr. Håkan	Senior Consultant, ORGUT Consulting
<u>Hakan s@fastmail.fm</u>	Bahr Dar, Ethiopia
	<u>Tel:+251</u> 918 340 041
Temu, Dr. August	Director Partnerships, ICRAF; Member AFF GC
a.temu@cgiar.org	P.O. Box P.O. Box 30677-00100, Nairobi, Kenya
	<u>Tel:+254</u> 020 722 4000 Ext 4197
Walugembe, Mr. David	Secretary General, Uganda Forest Association
Ug for assoc@yahoo.com	P.O. Box 2675, Kampala, Uganda
	<u>Tel: +256 77</u> 23 12 992
Yayé, Dr. Aissétou Dramé	Executive Secretary ANAFE,
a.yaye@cgiar.org	c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya
	<u>Tel:+254</u> 020 722 4000 Ext 4135
Yemshaw, Dr. Yonas	Programme Officer, African Forest Forum
y.yemshaw@cgiar.org	c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya
,,,	<u>Tel:+254</u> 020 422 4000 Ext 4804
Zenebe Gebreegziabher, Dr.	Postdoctoral Fellow, Environmental Economics Forum for Ethiopia
zenebeg@yahoo.com	(EEPFE), Ethiopian Development Research Institute (EDRI)
u = ,	P.O. Box 2479, Addis Ababa
	Tel:+251 11 55 23 564

Programme and participants Lusaka

Programme

Workshop in Lusaka 27-29 April 2010

"African-Swedish collaboration programme on Sustainable Forest Management"

Organisers: African Forest Forum Royal Swedish Academy of Agriculture and Forestry

Venue: Protea Hotel, Cairo Road, Lusaka

The **main purposes** of the workshop are:

- To present the background document on potential areas of collaboration on SFM. This has been prepared by a team of AFF/KSLA experts through wide-ranging consultations in Eastern and Southern Africa and in Sweden since early 2009. The conceptual basis for the work was laid in the course of the project "Sustainable Forest Management in Africa" 2002-2008.
- To analyse and discuss the suggestions made in the document, as well as other proposals . that participants may put forward, on concrete fields suitable for collabora-tion between African, Swedish and other partners.
- To identify priority areas of collaboration which merit development by AFF and KSLA into full scale and fundable proposals in the remaining part of the planning phase of the programme, i.e. until December 2010.

PROGRAMME		
Day/time		Programme points
Tuesday 27/4 08	8.00	Registration of participants
09.00 - 1	17.30	Presentation sessions
		Co-Chairs: Mr. Deviness Tombo and Prof. Fredrick Owino Rapporteurs: Dr. Larwanou Mahamane and Dr. Yonas Yemshaw, AAF
0	9.00	"Lessons learnt on developing SFM in Sweden – relevance to Africa" – the background of the programme, activities to date, and expected follow up. Dr. Bjorn Lundgren, KSLA and AFF
0)9.45	"Processes and mechanisms of developing forest policies, and legislation and institutions to implement such policies" – analysis of situation, needs and opportunities in Southern Africa, and suggestions for collaborative interventions. Prof. Fredrick Owino , AFF
1	10.45	Coffee break
1	1.15	"Strengthening Africa's technical and institutional capacity to support SFM" – analysis of situation, needs and opportunities in Southern Africa, and suggestions for collaborative interventions. Prof. Romanus Ishengoma , Sokoine University
1	12.30	Lunch
1	13.30	"Organising and empowering stakeholders in the management and use of forest and tree resources" – analysis of situation, needs and opportunities in Southern Africa, and suggestions for collaborative interventions. Mr. Peter Gondo , AFF
1	4.30	 Welcome and short presentations of organisers/sponsors; official opening; African Forest Forum; Prof. Godwin Kowero, Executive Secretary Royal Swedish Academy of Agriculture and Forestry, Mr. Ake Barklund, Managing Director and Permanent Secretary Swedish International Development Cooperation Agency; H.E. The Ambassador of Sweden, Ms. Marie Andersson de Frutos Official opening, Mrs. Lilian Kapulu, Permanent Secretary, Ministry of Tourism, Environment and Natural Resources (MTENR)
1	15.30	Coffee break
1	.6.00	Short presentations of various relevant programmes and institutions:

	 Forest issues in SADC; Mr. Moses Chakanga The Forest Initiative; Ms. Gunilla Lidén
17.00	Round up of the day's presentations and dividing participants into working groups
Wednesday 28/4 08.00	 Continued short presentations: The Swedish University of Agricultural Sciences in Africa; Dr. Gert Nyberg The Swedish Forest Agency; Mr. Hakan Wirtén The Swedish Forest Owners' Association; Dr. Lennart Ackzell Green Resources Ltd. in Tanzania and Mozambique; Mr. Mwaniki Humphrey Ngibuini and Mr. Arlito Cuco
10.00	Three Working Groups:
	 "Processes and mechanisms of developing forest policies, and legislation and institutions to implement such policies" Chair: Mr. Joseph Hailwa Resource person: Prof. Fredrick Owino Rapporteur: Mr. Enos Shumba Among proposals to discuss are: Analyses of regional/trans-boundary forest issues Strengthening capacities to implement NFP-derived plans Analyses of land and tree tenure issues as constraints and opportunities in achieving SFM "Strengthening Africa's technical and institutional capacity to support SFM" Chair: Prof. Sara Feresu Resource person: Prof. Romanus Ishengoma Rapporteur: Dr. Larwanou Mahamane Among proposals to discuss are: Inventory and monitoring of forest, wood and NWFP resources Strengthening the need for improved technical level forestry training in E Africa Facilitating the up-grading of tree seed and germplasm improvement work in the region "Organising and empowering stakeholders in the manage-ment and use of forest and tree resources" Chair: Mr. Humphrey Ngibuini Resource person: Mr. Peter Gondo Rapporteur: Ms. Bettie Luwuge Among proposals to discuss are: Empowering producer stakeholders Income generating and poverty alleviating potentials of forests and
	 trees Strengthening professional forest associations/societies Improving access to finance for tree growers and small-scale forest enterprises
	 Strengthening the capacity of regional stakeholder institutions through linking forest working groups
19.00	Reception at Protea Hotel
Thursday 29/4 08.00-16.00	Presentations/discussions of the three Working Groups' conclusions and decisions on priorities Co-chairs: Prof. Godwin Kowero, AFF, and Mr Ake Barklund, KSLA Resource persons: B. Lundaren, F. Owing, B. Jakepersons and B. Conda

	Rapporteurs: Dr. Larwanou Mahamane and Dr. Yonas Yemshaw, AAF
08.00	Working Group No. 1
09.00	Working Group No. 2
10.00	Coffee break
10.30	Working Group No. 3
11.30	General discussion on the three WGs' proposals
12.30	Lunch
14.00	Discussing and deciding about which priority programme/activity proposals shall be further developed by AFF/KSLA
15.45	Where do we go from here? Dr. Bjorn Lundgren, KSLA and AFF
16.00	Concluding and summing up the workshop; Prof. Godwin Kowero and Mr. Ake Barklund



Participants in Lusaka workshop. The two ladies in the middle front row are Mrs. Lilian Kapulu, Permanent Secretary, Ministry of Tourism, Environment and Natural Resources, Govt. of Zambia, and H.E. Ms. Marie Andersson de Frutos, Ambassador of Sweden to Zambia, who opened the workshop.

Participants Lusaka 27-29/4/10		
Name/email	Position/Institution	
Ackzell, Dr. Lennart Lennart.ackzell@lrf.se	Senior Advisor International Affairs, Federation of Swedish Family Forest Owners Stockholm, Sweden	
Amosse, Eng. Olivia S. da Silva olisuzysilva@yahoo.com.br	Head of Forestry and Wildlife Dept., Provincial Direction of Agriculture, Forestry and Wildlife Department P.O Box 2996, Maputo, Mozambique <u>Tel:+258</u> 82 48 57 190	
Andersson de Frutos, H.E. Ms. Marie	The Ambassador of Sweden, Lusaka, Zambia	
Barklund, Dr. Pia Pia.barklund@mykopat.slu.se	Associate Professor/Forest Pathologist, Dept. of Forest Mycology and Pathology P.O Box 7026 75007, Uppsala, Sweden Tel:+46 18 671874	
Barklund, Mr. Åke Aake.barklund@ksla.se	Managing Director and Secretary General, Royal Swedish Academy of Agriculture and Forestry (KSLA) P.O Box 6806, Stockholm, Sweden Tel:+46 708 900 642/+46 8 54 54 77 02	
Chakanga, Mr. Moses	Forestry Advisor, GTZ/SADC Sustainable Forest Management and	
mchakanga@sadc.int moses.chakanga@gtz.de	Conservation Project, FANR Directorate, SADC Secretariat Private Bag 0095, Gaborone, Botswana <u>Tel:+267</u> 395 1863	
Cuco, Mr. Arlito Arlito.cuco@greenresources.no	Managing Director, Green Resources Mozambique SA 594, Ho Chi Min Av., Maputo, Mozambique <u>Tel:+258</u> 82 30 14 82/+258 82 30 71 437	
Fanta, Dr. Demel Teketay,	Research Scholar, Harry Oppenheimer Okavango Research Centre	
demeiteketay.ranta@orc.ub.bw dteketay@yahoo.com	Private Bag 285, Maun, Botswana <u>Tel:+267</u> 75 22 0185/+267 6867249	
Feresu, Prof. Sarah	Director, Institute for Environmental Studies, Univ. of Zimbabwe; P.O. Box	
feresu@ies.uz.ac.zw	MP167, Mount Pleasant, Harare, Zimbabwe Tel:+263 4 332 039/30 26 03	
Gondo, Mr. Peter peter@safire.co.zw	Deputy Director, Southern Alliance for Indigenous Resources (SAFIRE) P.O Box BE 398 Belvedere, Harare, Zimbabwe Tel:+263 4 79 4333	
Hailwa, Mr. Joseph Shaamu hailwaj@mawf.gov.na	Director of Forestry, Ministry of Agriculture, Water and Forestry GOP Private Bag 13184, Windhoek, Namibia	
Hensbergen, Dr. Hubertus van berty@wildhorus.co.uk	Chairman SSC Forestry and Managing Director Wildhorus Ltd The old Rectory Maidstone Road, ME 185EZ Kent, UK	
Ishengoma, Prof. Romanus ishengomarc@yahoo.com	Professor/Consultant, Sokoine University of Agriculture P.O. Box 3009, Morogoro, Tanzania Tel:+255 23 260 1674	
Kapulu, Mrs. Lilian	Permanent Secretary, Ministry of Tourism, Environment and Natural Resources (MTENR): Lusaka, Zambia	
Kokwe, Mr. Misael mkokwe@mtenr.gov.zm misaelkk@zamnet.zm	Advisor, Environment Mainstreaming Programme, Ministry of Tourism, Environment and Natural Resources (MTENR) P.O. Box 320008, Lusaka 10101, Zambia	
	Tel: +260 0 977794510	
Kowero, Prof. Godwin g.kowero@cgiar.org	Executive Secretary, African Forest Forum (AFF) c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya Tel:+254 20 7224000 ext 4203	
Larwanou, Dr. Mahamane m.larwanou@cgiar.org	Senior Programme Officer, African Forest Forum (AFF) c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya Tel:+254 20 7224000 Ext 462	
Lidén, Ms. Gunilla gunilla@forestry.se	Project Officer, The Forest Initiative, Swedish Forestry Association P.O. Box 1159, SE-11181 Stockholm, Sweden Tel:+46 0 8-4121520	
Lubembe, Ms. Evelyn e.lubembe@cgiar.org	Finance and Administrative Assistant, African Forest Forum (AFF) c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya Tel:+254 20 7224000 ext 4150	
Lundgren, Dr. Björn	Chairman KSLA Committee for International Forest Issues; Member AFF	
bjorn.iunugren@exman.se	Tengdahlsgatan 49, SE-16647 Stockholm, Sweden Tel: +46 8 6436885	
Luwuge, Ms. Bettie	Carbon Enterprise Coordinator, MJUMITA (Community Forester	
bluwuge@gmail.com	LONSERVATION NETWORK OF LANZANIA)	

	P.O. Box 21522, Dar es Salaam, Tanzania
	<u>Tel:+255</u> 22 266 9007
Mabunda, Mr. Rito	Forest Programme Coordinator, WWF-Mozambique
Incontabunda@wwi.org.mz	Tel:+258 21 48 31 21
Makumba, Mr. Ignatius	Acting Director Environment, Ministry of Tourism, Environment and Natural
inmakumba@yahoo.com	Resources (MTENR)
	P.O.Box 34011, Lusaka, Zambia
Malala, Mr. Francis Sokomoka	Chairman, Timber Producers Association of Zambia (TPAZ)
Iskmalala@yanoo.com	Tel: + 260 977 858526
Malele Mbala, Mr. Sébastien	Directeur (DIAF/MECHT), Ministre de l'Environment, Vice Chair AFF GC
semalele@yahoo.fr	BP 1461 Kinshasa 1, Démocratique République du Congo
	<u>Tel: +243</u> 815080720
Maarifa, Mr. Mzee Ally	Executive Officer, Tanzania Association of Foresters
	Tel: +255 272 7540 33
Mgoo, Mr. Juma S.	Acting Assistant Director Forest Development, Forestry and Beekeeping
jsmgoo@hotmail.com	Division
	P.O. Box 426, Dar es Salaam, Tanzania
Mickola Kakwa Ma Cupi	Lei:+255 /84 483 599
guni@zamnet.zm	P.O. Box 320 115, Lusaka, Zambia
ga	<u>Tel:+260</u> 0 977 771 224
Mosimanegape, Mr. Gotsileone	Environmental Programmes Officer, Secretariat-National CBNRM Forum,
gmosimanegape@kcs.org.bw	Kalahari Conservation Society
	P.O. Box 859, Gaborone, Botswana Tel: $\pm 267, 397, 4557$
Msimuko, Mr. John	Executive Director, Keepers Zambia Foundation
jmsimuko@mail.zamtel.zm	P.O Box 34745, Lusaka, Zambia
	<u>Tel:+260</u> 211 293 333
Mubaiwa, Mr. Lloyd	Chief Executive Officer, Timber Producers Federation
	120. BOX 1730, Mulare, ZIMDADWe Tel: +263 912 514 479
Mulenga, Mr. Frederick	Principal, Zambia College of Forestry
Mulengaf1959@gmail.com	P.O. Box ??, Mwekele, Kitwe, Zambia
Ngibuini, Mr. Humphrey	Managing Director, Green Resources Ltd., Member AFF GC
mwanikingibuini@gmail.com	P.O. Box 4730, Dar es Salaam, Tanzania
Nshingo, Mr. Cosmas	Director of Plantations, Zambia Forest and Forest Industries Company
zaffico@kitwe microlink.zm	(ZAFFICO)
	P.O. Box 71566, Ndola, Zambia
Nyambe Dr. Nyambe	<u>161: +260 966</u> 922 970 616223 Project Coordinator, Community-centred Conservation and Development
nnyambe@wwfzam.org	Project, WWF, Zambia;
	P.O. Box 50551 RW, Lusaka Zambia
	<u>Tel:+260</u> 211 255 598
Nyberg, Dr. Gert	Researcher/Coordinator, Department of Forest Ecology and Management &
Gentinyberg@sex.sid.se	SE-90183 Umea, Sweden
Ohlsson, Dr. Eva	Programme Officer, Sida, Swedish Embassy
Eva.ohlsson@foreign.ministry.se	Lusaka, Zambia
Ojanen, Ms. Marja Marja Ojanon@formin fi	Counsellor, Embassy of Finland
	Tel:+260 977 771 378
Owino, Prof. Fredrick	Managing Director, Forest Resources International (FORIN), Member AFF
forin@kenyaweb.com	GC;
Deserve Mar Linda	P.O. Box 13762-00800, Nairobi, Kenya
kosseau, Ms. Linda	Member AFE SC:
indum@sdrcoi.co.zu	P.O. Box 1771, Silverton 0127, South Africa
	<u>Tel:+27124813656</u>
Selemane, Mr. Thomas	National Coordinator, Friends of Forests (Amigos da floresta)
I homselemane9@gmail.com	P.U. Box 3266, Maputo, Mozambique
Shumba, Mr. Fnos	Country Director, WWF SARPO. Zimbabwe
eshumba@wwfsarpo.org	P.O. Box CY1409, Causeway, Harare, Zimbabwe
	<u>Tel:+263</u> 42 52 533-34
Sjöholm, Mr. Hăkan	Programme Management Advisor, ORGUT
Hakan s@tastmail.tm	P.O. Box 134, Bahir Dar, Ethiopia

	<u>Tel:+251</u> 0 8 058
	Mobile:+251 0 9 091
Tombo, Mr. Deviness	Chief Research Officer, Forest Research Branch
devinesstombo@gmail.com	P.O. Box 22099, Kitwe, Zambia
	<u>Tel:+260</u> 212 223 744
Wirtén, Mr. Hakan	Deputy Director General (Forestry Issues), Swedish Forest Agency
Hakan.wirten@skogsstyrelsen.se	SE-55183 Jonkoping, Sweden
	<u>Tel:+46</u> 36 35 94 3
Yemshaw, Dr. Yonas	Programme Officer, African Forest Forum (AFF)
y.yemshaw@cgiar.org	c/o ICRAF, P.O. Box 30677-00100, Nairobi, Kenya
	<u>Tel:+254</u> 20 7224000 Ext 4804

Appendix 3.

Project proposal concept notes

In the course of the consultations and analyses done in the context of this project, we initially identified 13 possible priority areas for cooperation in the three fields of investigation, which we felt would be suitable for collaboration between partners in Eastern and/or Southern Africa on the one hand and Swedish and other external partners on the other. When these were presented and discussed at the workshops in Nairobi and Lusaka in April 2010, participants identified two further priority areas that were felt suitable for possible collaborative efforts. This appendix contains the full project proposal concept notes in the form they have been developed by the project team with inputs from several partners, particularly at the meetings in Nairobi and Lusaka. When entering into negotiations for technical and financial partnerships for the implementation of the proposals, some modifications may likely be done to accommodate partners' views and priorities. Likewise, budgets and LDAs will be developed in collaboration with partners. Already at the time of writing this report (February 2011), five of the proposals have attracted sufficient interest and commitment from financial partners that they are likely to enter into first phase implementation already this year.

1. Forest policies and legislation/institutions to implement them

1.1 Enhancing and supporting trans-boundary forest management initiatives

1.2 Strengthening capacities to implement and monitor nfp processes in E and S Africa

1.3 Analyses of impacts of land, forest and tree tenure systems in achieving SFM

1.4 Wood as a source of energy – potentials and implications on policies and legislation

2. Strengthening Africa's technical and institutional capacity to support SFM

2.1 Inventory and monitoring of forest, wood and NWFP resources

- 2.2 Strengthening of forest research
- 2.3 Building up Forest Certification capacity in Africa
- 2.4 Analysing needs for improved technical level forestry training in E & S Africa

2.5 Facilitating the up-grading of tree seed germplasm improvement in Eastern and Southern Africa

3. Organising and empowering stakeholders in the management and use of forest and tree resources

3.1 Empowering producer stakeholders

3.2 Income generating and poverty alleviating potentials of forest and tree products and services

- 3.3 Strengthening Professional Forest Associations and Societies
- 3.4 Improving access to finance for small-scale tree growers and forest enterprises

3.5 Strengthening the capacity of regional stakeholder institutions through linking forest working groups

3.6 Improving medium/large forest industries in the region

Project proposal 1:1

Enhancing and supporting trans-boundary forest management initiatives

(Finalised 2011-04-09)

Background and justification

A number of major issues of a trans-boundary and regional nature, where forests and forest policies and legislation, or the lack of them, have significant roles to play, have come into prominence in recent decades. The most obvious one, and the one attracting considerable international attention and negotiating effort today, are all the questions related to forest-climate interactions (including the REDD discussions). Other environmental regional links to forests include biodiversity conservation (cf. trans-boundary national parks, such as the "four corners" area) and desertification. The general problem is often that while countries in the region are already party to several multilateral environmental agreements (MEA), sub-regional protocols and project-based bilateral instruments, nothing much is being implemented within individual countries because the agreements and instruments have not been "internalised" in country policies and legislation. The general trend has been for countries to become party to agreements, with good intentions, and then fail in follow up country actions largely due to lack of technical capacity. The GEF cross-border biodiversity project, the Mount Elgon Regional Conservation Project (MERCEP), implemented by IUCN, and the Uganda–Rwanda Mountain Gorilla project can, however, be considered as good experiences.

The issue of international trade, and particularly how to reduce illegal trade (e.g. in timber, charcoal, rosewood, blackwood, wild orchids and other NWFPs, etc.) is the focus for the FLEGT process. Regional bodies, such as COMESA and EAC, are increasingly recognising the importance of intra-regional trade in forest products, and trade tariff agreements nowadays include these.

The role of forests in cross-boundary hydrological conditions, while not a new question, is becoming more and more important as the water supply problems are worsening - cf. the many "watershed" based programmes (the Nile, Zambezi and Limpopo Rivers, the Lake Victoria Basin, the Songue River Catchment, and the Okavango Basin programmes, etc.), or the "water tower" discussions in Kenya, and the SADC "Forest Protocol" emphasising the role of forest to shared water courses. Other water-related trans-boundary initiatives are the ones between Sudan–Uganda and Sudan–Ethiopia.

There is a long tradition of managing Trans Frontier Conservation Areas (TFCA) and wildlife corridors, particularly in Southern Africa, e.g. the Kavango-Zambezi (KAZA) Park straddling Angola, Botswana, Namibia, Zambia and Zimbabwe, Greater Limpopo, Malawi-Zambia and mid-Zambezi-Luangwa areas. In East Africa there is the Mountain Gorilla Project between Uganda and Rwanda. The managed resources in all these cases are focussing on the wildlife – there are very few, if any, cases where the forest and tree transboundary resources *per se* are the focus of management, even if there are many places where joint management of forest resources shared by two or more countries would be relevant and justified. Future actions are needed to strengthen the functioning of TFCAs. Furthermore, there is need to understand and to sustain ecological linkages between forests and national parks and wildlife reserves in all the countries.

The competition for land for different uses – food, fibre, fuel (the 3Fs) – have only come into focus in the last few years, as the "scramble for land" (not least sparsely populated forests and wood-lands) by international and national commercial interests has become obvious. The International Food Policy Research Institute (IFPRI) has, for example, calculated that between 2006 and late 2009, 15-20 million hectares of land in "poor countries" have been sold or are under negotiation for sale to foreign buyers – much in Africa and much for forest plantations. Also the issues related to spread of fires (SADC has a GTZ-funded programme on this), pests and diseases, invasive species, and the movement of and regional collaboration on tree seed and germplasm are important.

In some cases, trans-boundary forests and woodlands are degraded through settlements of large numbers of refugees. For example, forests and woodlands in the Kagera River Basin, which rises in Burundi and flows through Rwanda, Uganda and Tanzania into Lake Victoria, are facing increasing pressures and degradation as a result of sudden and big increases in population, mainly refugees,

often relying on unsustainable land use and natural resources management practices. The basin's land and freshwater resource base, and its associated biodiversity, are threatened by a declining productive capacity of cropland, rangeland and forests.

All these issues and trends are very obvious and relevant in an African context. Not only do they take up significant time and effort for African governments in various international processes and fora, they are also increasingly recognised at the continental level, e.g. through the incorporation of forests and forestry (with the help of AFF) into the NPCA/AU Comprehensive African Agricultural Development Programme (CAADP).

Still, there is, in many cases and for many of these issues, neither sufficient capacity to analyse the regional implications, problems and opportunities associated with them, nor national and regional policies and resources in place to address them. The African Forest Forum has, in its short time in existence (since 2007), either taken a lead in or been asked to contribute to assisting African governments and regional bodies with technical and policy advice in connection with some of these issues and processes (UNFF, FLEGT, REDD, UNFCCC, AU-AMCEN). However, the capacity of the AFF Secretariat and its expert and working groups is far from sufficient and there is a need in Africa to build up a solid capacity, also at existing regional bodies, to analyse and provide advice on technical and policy aspects of regional and trans-boundary issues.

There is considerable experience of international and regional forest policy dialogue and issues in many Swedish institutions and some of this may be possible to take advantage of in building up the capacity in Africa. Training courses, policy research and analyses, staff exchange programmes, seminars, building up data bases on relevant issues and aspects, and many other mechanisms for conveying and adapting Swedish experience could form the basis for a partnership.

Project proposal

In order to find solutions to trans-boundary forest issues it is proposed that a project is carried out in two phases over a three-four year period. The first phase would comprise analytical studies, whereas the second phase would start with a set of workshops at which the studies are presented and discussed and then, based on this, initiate a range of activities addressing the overall aim below. Initially, funding is sought for the first phase, with tentative and indicative figures of what might be required in a second phase. The project is proposed to be coordinated and administrated by AFF, with relevant national, regional and international partners involved as indicated in the summary "Work Plan and Activities" table below. There will be synergies, particularly in the initial analytical phase, between this project and other AFF activities, e.g. on climate, FLEGT, water, etc.

Overall aim:

To strengthen regional and national capacities to analyse trans-boundary forest management and conservation issues and to support improved management of trans-boundary forest ecosystems.

Specific objectives for and activities in phase I

The first phase of one year's duration of the project will involve desk and field assessment of the current status of forestry and tree resources in major trans-boundary ecosystems with specific objectives to:

- Provide a background description and analysis of different forest and woody vegetation types and their ecological status;
- Identify trends in land management practices and systems and their effects on trans-boundary forest resources;
- Identify driving forces and pressures influencing trans-boundary forest resources utilisation;
- Identify major threats/challenges and opportunities for promoting sustainable management and utilisation of forest and tree resources; and,
- Make recommendations on specific interventions to reverse the negative trends and enhance positive trends.

This will be achieved by implementing three major studies elaborating the issues mentioned in the background section above, viz.:

- One on transboundary environmental issues related to forests biodiversity conservation, desertification, water/hydrology, invasive species and pests, etc.
- One on transboundary trade in forest/tree-derived products; issues, problems and potentials; both legal and illegal aspects, FLEGT, etc.
- One on transboundary land issues competition for forest land and for land for forest and other production.

Each of these studies will be commissioned to consultants and/or institutions with relevant knowledge; each study will have an advisory committee made up of experts from relevant institutions and individuals with good knowledge of the issues (4-5 people in each committee). The committees will provide guidance on the scope of each study.

Specific objectives for and activities in phase II

The second, two-three years, phase of the project will focus on developing activities that address the overall aim of the project, i.e. to strengthen regional and national capacities to analyse transboundary issues and support improved management of trans-boundary forest ecosystems.

It will start by organising three regional (East and Southern Africa) workshops to present and discuss the outcomes and recommendations coming out of the three studies carried out in phase I. The workshops will identify and prioritise follow-up actions and plans, which may comprise, but not be limited to:

- Develop training and information material based on the studies and the workshops; done by special experts and consultants.
- Disseminate information and implement training for relevant personnel in national and regional bodies; also organise topical seminars on trans-boundary issues; initiate staff exchange programmes to enhance learning from each others across boundaries.
- Set up data-bases on relevant transboundary forest/tree-related issues; preferably at AFF, but could also be elsewhere, e.g. at AU Commission, EAC and SADC Secretariats.
- Develop models and regional mechanisms towards supporting sustainable trans-boundary forest resources management initiatives.
- Identify and conduct relevant policy research; facilitate high level policy makers' meetings in the region to discuss and analyse trans-boundary issues

Work-plan and activities

Below follows in tabular form a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities

Activity description	Responsible people and partners; roles	Time plan
Phase I	African Forest Forum overall respon- sible, consultants and partners as indicated	Jan-Dec 2011
1. Study on "Transboundary environ- ment issues related to forests – bio- diversity conservation, desertification, water/hydrology, invasive species/pests, etc."	AFF Senior Programme Officer (coordinator) Expert consultant to do study; Advisory committee made up of 4-5 people/ institutions, e.g. from Govt. and NGO environ- mental actors, regional WWF and IUCN offices, UNEP; possible input from Sweden by SLU, focali, EfD, Agri4D	2 months early/mid-2011
2. Study on "Transboundary trade in forest/tree-derived products; issues, problems and potentials; both legal and illegal aspects, FLEGT, etc."	AFF Senior Programme Officer (coordinator) Expert consultant to do study; Advisory committee made up of 4-5 people/ institutions, e.g. from SADC, EAC, and COMESA Secretariats, TRAFFIC, CITES, CIFOR, FAO	2 months mid-2011
3. Study on "Transboundary land issues	AFF Senior Programme Officer (coordinator)	2 months

 competition for forest land and for land for forest production." 	Expert consultant to do study; Advisory committee made up of 4-5 people/institutions, e.g. from FAO, IIASA	mid/late-2011
Phase II	African Forest Forum overall responsible, with partners as indicated	Jan 2012 - Dec 2014
 Three sub-regional Workshops; each focusing on the three study topics from phase I. 	AFF Project Leader c. 20 key people from the region and 5 from outside at each of the workshops	March, May, July 2012 respectively
5. Develop training and information material.	AFF Project Leader Consultant 3 p/m Supporting inputs by partner institutions	July-Dec 2012
 Disseminate information and implement training; organise topical seminars on trans-boundary issues; initiate staff exchange programmes. 	AFF Project Leader One training event and one seminar, for tech- nical people, per annum in each of the three topics of the studies Resource persons from partner institutions	2013-2014
7. Set up data-bases on relevant trans- boundary forest/tree-related issues.	AFF Project Leader Consultant 3 p/m per year	2012-2014
8. Develop models and regional mechanisms in support of sustainable trans-boundary forest resources management initiatives.	AFF Project Leader Consultants 3 p/m per year	2012-2014
9. Identify and conduct relevant policy research to study, and facilitate high level policy makers' meetings to discuss, trans-boundary issues	AFF Project Leader Research partners at regional Universities and Forest Research Institutes Possible inputs from SLU and EfD in Sweden; One policy level meeting each year	2012-2014

Strengthening capacities to implement and monitor nfp processes in E and S Africa

(Finalised 2011-04-09)

Background and justification

Many countries in the world are currently, or have recently completed, reviewing the way in which they plan, implement and monitor activities in the forestry sector. This is in response to a number of factors that include the recognition of the wide range of goods and services that forests provide at local, national and international levels. Given the wide range of interests and stakeholders in forest management and the potential for conflict between interests and forest management objectives, many of the review processes have adopted a broad-based and participatory approach to developing or reviewing their national forest programmes. By definition, the term **national forest programme** (nfp) is a generic expression for a wide range of approaches towards forest policy formulation, planning and implementation at the sub-national and national levels. As one of the most important outcomes of international forest policy dialogue, the nfp is the first commonly agreed framework for sustainable forest management which is applicable to all countries and to all types of forests. The nfp also serves as a framework to put international agreements on sustainable forest management into practice. In terms of actions required the components of an nfp are shown in Figure 1 below.



Figure 1. Components of an nfp.

The nfp is a country-specific process which provides a framework and guidance for:

- country-driven forest sector development;
- national implementation of internationally agreed concepts (such as sustainable forest management), agreed obligations (e.g. UN conventions) and proposals (e.g. Proposals for Action drawn up during the IPF/IFF process);

 external support: nfps have been declared the common frame of reference for forest-related international cooperation by the world's major organisations and fora and most bilateral donors.

Most countries in Eastern and Southern Africa have already formulated their nfps and are in varying stages of their implementation. Moreover, many of the countries are reviewing their nfp processes with support from the global National Forest Programme Facility (NFP Facility) and from FAO. Several countries in Eastern and Southern Africa, including five of the six countries under this study (all except Ethiopia), have benefited from this support. From the current review of implementation of nfp-driven plans it is, however, clear that countries are making very slow progress. For most countries, the key limitations lie in achieving policy, legislation and institutional reforms which are necessary to implement nfp-driven plans. In spite of the support from the NFP Facility and other development partners, which is mainly catalytic in nature and therefore limited to the review and planning process itself, there is need for more sustained support not only for the comprehensive forest policy, legislation and institutional reviews, but also for the means in the form of knowledge, information, human capacity and resources required to *implement* the plans.

One cause for concern is that in many countries, the review of the nfp process is made by external consultants (under contracts often administered by FAO) who do the background studies and provide recommendations on the way forward. This often ensures highly qualified consultant inputs, but it also has as a result that it does not result in the development of capacities of the National Public Forest Administrations to undertake this type of analysis and to develop an in-depth understanding of the sector. As a result, besides the national NFPA coordinator, virtually no one else in the NFPA knows or understands fully the nfp review and design process, leading to a lack of critical mass of people in the PFA to implement nfps.

Nfp processes in different countries often lack strong links to local (district) level forestry development. There is thus a special need to strengthen the support to nfp activities at the local level and to promote a feedback between the central and local administrative levels in matters related to forests and trees. It is also noted that this approach facilitates the participation of local action such as NGOs, CBDs and women groups in the whole nfp process.

While nfps include strategies and plans for mobilising financial resources for their implementation, there has been limited success in this area. There is now a real danger that many of these plans shall remain unimplemented after raising so much hope and interest amongst national stakeholders and their regional and international partners. An in-depth understanding of the current challenges, constraints and opportunities in the implementation of the nfps in the region is required to inform and facilitate viable implementation strategies.

Specifically, there is need for sustained capacity building in policy and legislation reviews and in national forest programmes planning and implementation. In view of the common development contexts of the different national nfp processes, and their problems, needs and opportunities in the Eastern and Southern African regions, it is of additional benefit to adopt a regional approach in analysis of progress and in recommending aspects for improvement in nfp implementation. This can be achieved through (i) detailed regional analyses of nfp processes, (ii) sharing of knowledge and experiences among key actors in the region (Learning Group Networks), and, (iii) publication of policy briefs which can be used for advocacy for improved nfp implementation by the African Forest Forum and other continental bodies, e.g. the African Ministerial Committee on Environment and Natural Resources (AMCEN).

Project proposal

It is proposed that a project is initiated under the coordination and administration of the African Forest Forum, working with relevant national and international partners, to enhance the implementation of national forest programmes (nfps) and strengthen the capacity to do so. Particular attention will be given to exploiting regional synergy effects, e.g. by countries learning from each others' experiences and by having joint capacity building activities, seminars, etc. A first phase of one year's duration will analyse the current situation, needs and opportunities, and draw up a plan for actions during a second project phase of two years duration. The project will focus on countries in Eastern and Southern Africa already involved with nfps, i.e. Kenya, Uganda, Tanzania, Rwanda, Zambia, Zimbabwe and Mozambique.

Overall aim

To strengthen capacities of countries in Eastern and Southern Africa to formulate, implement and monitor their national forest programmes towards achievement of sustainable forest management.

Specific objectives for and activities in phase I

The first phase, during the first year of project implementation, will have the following specific objectives:

- > Evaluate the modalities, capacity and resources for implementing forest sector reforms and national forest programmes.
- > Conduct regional workshops and study tours for lesson learning.
- > Provide material and information for advocacy and support to country processes.

These will be achieved by implementing four major activities:

- The existing capacity for forest sector reforms in participating countries will be evaluated through reviews of FAO-based databases of country nfps and through other sources of information, and through visits to countries. These reviews will form the basis for determining capacity building needs, for recommending changes in modalities for nfp implementation, and for relevance and effectiveness in mobilising adequate financial resources. Particular attention will be given to reviewing modalities currently in use.
- Two regional workshops (one for Eastern Africa and one for Southern Africa) will be convened to involve key actors from the participating countries. The workshops will have as their main inputs the findings and recommendations from the reviews, and focus on different aspects of forest sector reforms and national forest programmes (policy and legislation reviews, community participation, private sector participation, enhancement of investment, etc.) and will be conducted in a highly participatory manner.
- > Study tours will be conducted for key players (nfp teams) in selected countries.
- Policy briefs will be published and disseminated for each of the selected countries. The policy briefs will highlight the status, challenges and way forward for country nfp process.

Specific objectives for and activities in phase II

The second, two years phase of the project will focus on implementing activities that address the overall aim of the project, i.e. to strengthen capacities of countries in Eastern and Southern Africa to formulate, implement and monitor their national forest programmes towards achievement of sustainable forest management. Based on the study and workshop recommendations and findings, a plan of action will be drawn up focussing on, among else:

- How to empower national and regional, government and NGO stakeholders to design and implement nfps through training, technical assistance, networking for lessons learning and through strengthening partnerships with continental and sub-regional organisations – at national level stakeholders are often already organised in Forest Working Groups, initiated through the nfp process.
- Establish a regional Learning Group Network to strengthen capacities of countries in the region to formulate and implement their forest policies, legislation and plans, through regional training and shared learning workshops and through country exchange visits.
- > Identify mechanisms for local (district) level nfp planning, implementation and monitoring that also provide feedback to the central level nfp process.

Work-plan and activities

Below follows in tabular form a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities

Activity description	Responsible people and partners; roles	Time plan
Phase I	African Forest Forum overall responsible, consultants and partners as indicated	Jan-Dec 2011
1. The existing capacity for forest sector reforms in participating countries evaluated through reviews of FAO-based databases of country nfps and through other sources of information, and through visits to countries. The reviews will form the basis for determining capacity building needs, for recommend- ing changes in current modalities for nfp implementation, and for relevance and effectiveness in mobilising adequate financial resources.	AFF Senior Programme Officer (coordinator) Two regional consultants doing study on "status and modalities of nfp implementation" and two on "identifying human capacity building needs" National Government, NGO and private sector partners from the seven countries National Forest Working Groups EAC and SADC Secretariats NFP Facility in Rome Possibly Swedish Forest Agency	February-August
2. Two regional workshops (one for EA and one for SA) convened to involve key actors from the participating countries. The main inputs to the workshops will be the findings and recommendations from the reviews, and focus on aspects of forest sector reforms and nfps.	AFF Senior Programme Officer (coordinator) Regional facilitators, one for each workshop Participants from above partner countries and organisations, plus AMCEN, FAO, CIFOR, IUCN, WWF and IIED	September- October
3. Study tours conducted for key players (nfp teams) in selected countries.	AFF Senior Programme Officer (coordinator) Regional facilitators and tour leaders	September- November
4. Policy briefs produced and dissemina- ted for each of the selected countries. The policy briefs will highlight the status, challenges and way forward for country nfp process.	AFF Senior Programme Officer (coordinator) KSLA possibly involved in production of policy briefs	November- December
Phase II	African Forest Forum overall responsible, with partners as indicated	Jan 2012 – Dec 2013
1. Empowering national and regional, government and NGO stakeholders to design and implement nfps through training, technical assistance, network- ing for lessons learning and through strengthening partnerships with conti- nental and sub-regional organisations, e.g. Forest Working Groups.	AFF Project Leader Relevant Consultants and Resource Persons National institutions and NGOs, National Forest Working Groups and other stakeholders from participating countries, Regional organisations EAC, SADC International NGOs: IUCN, WWF, IIED Research/Development institutions: NFP Facility, FAO, CIFOR, ICRAF Possible Swedish resource organisations: SLU's Forest Faculty; Dept. of Economics at Univ. of Gothenburg; Swedish Forest Owners' Federa- tion; Swedish Forest Agency.	Whole project period
2. Establish regional <i>Learning Group</i> <i>Networks</i> to strengthen capacities to formulate and implement forest policies, legislation and plans, through regional training and shared learning workshops and through country exchange visits.	AFF Project Leader Same partners as above	Whole project period
3. Identify mechanisms for local level nfp planning, implementation and monitoring that also provide feedback to the central level nfp process.	AFF Project Leader Mainly national stakeholders	Whole project period

Analyses of impacts of land, forest and tree tenure systems in achieving SFM

(Finalised 2011-04-09)

Background and justification

In all discussions, plans, programmes, policies and strategies on the development and improvement of the agricultural and natural resources sectors in Africa, sooner or later one invariably runs into the complex issue of land and resources tenure. Not surprisingly, several studies and research programmes in the last ten years or more have focused on trying to elucidate these complicated issues and many international policy and research institutions, e.g. FAO, IUCN, the Rights & Resources Initiative (RRI), the International Land Coalition, and the University of Helsinki, have published valuable reports.

No single set of issues have had, and continues to have, such a profound influence on the development potentials and options in agriculture, forestry and livestock management in Africa. Old, traditional land and resource tenure and use systems are in place in many parts of Africa. There are communal and "tribal" lands with special rules for use. Many colonial governments declared forests and other "unused" lands to be Government land, either classified as forest reserves or as (wildlife) conservation areas, and in some countries land was set aside for private (normally European) medium- and large scale farming. After independence, most forest and other land that had been declared reserves remained in Government hands, whereas some of the big private farms were subdivided and settled by small-scale farmers (others remained in tact). Large tracts of woodland and savannas are under various forms of either communal user rights or under formal, though not always *de facto*, control of various levels of local Government. Add to this the increasingly common misuse of land, not least forest land, as a political tool for buying local support.

Land and tree tenure issues are particularly important in considering constraints and opportunities in achieving SFM through participation of communities and individual tree farmers. This is a whole new area for focused policy and legislation for countries in Eastern and Southern Africa, and there are today ambitious plans and attempts for land reforms aiming at more long-term secure user rights by farmers and/or communities. Government administrations and services are being decentralised to better support such efforts. Various legal and administrative mechanisms and models are explored for communities to manage "public" forests and woodlands. Several countries (e.g. Tanzania, Uganda, Mozambique, and Kenya) have introduced constitutional and land law changes which strengthen ownership of public forest land by communities. In principle, the shift from exclusion to ownership rights and responsibilities offers great opportunities to achieve SFM through CFM and other forms of joint ventures with communities and, for example, private enterprises. However, the changes are being introduced ahead of clear definition of forest management responsibilities and development of technical capacity of the emerging owner and manager - the local communities. In some cases the changes are being introduced in ways which could result in more destruction of forests. There is need to analyse under which set of circumstances such changes in forest land tenure will help achieve SFM.

In spite of these developments, there is still an inherent reluctance in many African states and communities to accept full private ownership of agricultural and forest land with the possibility of capitalising one of the biggest natural resource assets in Africa, i.e. land itself. There are many reasons for this, one no doubt being that one implication of full private ownership would be the movement of people across traditional boundaries between ethnic groups, a situation that has occurred in, for example, Kenya with terrifying results in ethnic violence. Another problem is that, even if ownership rights exist on the paper, Governments, sometimes with the best intentions, may introduce restrictions on the owner rights. For example, some countries (Sudan, Kenya) are planning to introduce binding legislation for certain percentage of farmland, including private farms, to be under tree cover. To what extent are such policies realistic under increasing sub-division of farmland parcels, and how will it influence private farmers' attitudes towards trees?

As a combined result of the often uncertain or insecure land tenure situation, and the fact that there are very limited, if any, possibilities to take loans using the land itself as collateral, there is

often a reluctance or inability to make major investments in land improvement. Naturally, this difficulty is even more pronounced when it comes to investing in long-term undertakings such as tree growing. The problems of finding capital for investment in land and trees are shared by farmers, communities and private, commercial investors alike.

Project proposal

It is proposed that a two-year project is carried out under the coordination and administration of the African Forest Forum, working with relevant national and international partners. The project will analyse and enhance our understanding of how land, forest and tree tenure systems create constraints and opportunities for communities, farmers and the public and private sectors to derive incomes and other benefits from forests and trees. It will also attempt to identify feasible and effective ways of overcoming constraints and realising potentials, e.g. through policy and legislation changes, institutional reforms, enhanced capacity, and research programmes. There will be a significant focus on regional and cross-country learning and exchange of experiences, as well as learning from the experinces from outside the region, e.g. from Sweden. The initial project focus will be on the Eastern and Southern Africa regions, but may well extend to other regions of the continent in later phases and/or if additional funds to the suggested budget herein are made available.

Overall aim

To make an in-depth analysis of how different land, forest and tree tenure conditions in E & S Africa affect public and private participation in tree growing and sustainable forest management, and, based on this analysis, suggest and design ways forward to improve the situation.

Specific objectives and activities

- Carry out an in-depth analysis of the current and emerging situation with regard to land and resources tenure systems and how they impact on the potential development of the tree and forest sector taking into account their different attributes as well as property rights.
- Make an analysis of institutional, legal, administrative, extension and other support systems and how they influence and are influenced by forest and tree tenure conditions. Also include international mechanisms and agreements, e.g. REDD+, FLEGT, CDMs, certification, etc.
- Analyse different recent developments where land reforms, administrative devolution, new partnerships (e.g. between communities and private enterprise or outgrower schemes) and other actions have changed land and tree tenure situations.
- Assess the potential value of forest and tree products and services for communities and farmers under different evolving tenure and rights systems
- Based on the analyses above, identify and suggest activities on how to overcome constraints caused by various land and tree tenure characteristics and practices.
- Present analyses, plan and suggested activities at two regional workshops.
- Produce a major report and several policy briefs based on the analyses, plans and outcomes of workshops

Work-plan and activities

Below follows in tabular form a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities:

Activity description	Responsible people and partners; roles	Time plan
	African Forest Forum overall respon- sible, consultants and partners as indicated	2012-2013

1. In-depth analysis of the current and emerging situation with regard to land and resources tenure systems and how they impact on the potential develop- ment of the tree and forest sector taking into account their different attributes as well as property rights.	AFF Senior Programme Officer (coordinator) Two regional consultants, one for E and one for S Africa, carrying out analysis	January-October 2012
2. Analysis of institutional, legal, admini- strative, extension and other support systems and how they influence and are influenced by forest and tree tenure conditions; also include international mechanisms and agreements	AFF Senior Programme Officer (coordinator) Two regional consultants, preferably the same as above.	January-October 2012
3. Analysis of different recent develop- ments where land reforms, administra- tive devolution, new partnerships (e.g. between communities and private enter- prise or out grower schemes) and other actions have changed land and tree tenure situations.	AFF Senior Programme Officer (coordinator) One regional consultant to cover land reforms, devolution and partnerships	August -December 2012
4. Assess the potential value of forest and tree products and services for com- munities and farmers under different evolving tenure and rights system	AFF Senior Programme Officer (coordinator) One regional consultant	August-December 2012
5. Identify and suggest activities on how to over-come constraints caused by various land and tree tenure characteristics and practices.	One lead consultant working with the four consultants responsible for analyses and assessments above.	January-June 2013
6. Present analyses and plan, and suggested ways to make best use of findings and follow up valuations at two regional workshops.	Lead consultant, same as above One facilitator at each workshop	August/September 2013
7. Produce a major report and several policy briefs based on the analyses, plans and outcomes of workshops	Lead consultant, with inputs and assistance from other involved consultants and AFF staff	September- December 2013

Possible partners to consult and invite to workshop.

- Forest Agencies, Research Institutes, Land Authorities, and some university departments in concerned countries;
- NGOs such as Environmental Alert, Farmers' and Land Owners' organisations, the private sector; various National Forest Working Groups;
- Regional and international institutions and organisations, such as WWF, ICRAF, CIFOR, IIED, Rights & Resources Initiative;
- Swedish and other possible partners, such as the Swedish Forest Agency and the Forest Owners' Association, some university institutions in Sweden and elsewhere, e.g. Tropical Resources Institute at the University of Helsinki.

Project proposal 1:4

Wood as a source of energy – potentials and implications on policies and legislation

(Finalised 2011-04-09)

Background and justification

There is a great dependency on wood as a source of domestic energy in most countries in Africa. For example, in countries like Kenya, Rwanda and Tanzania, households are up to 90% dependent on wood-based sources of energy. With increasing population levels and poverty remaining very high, increasing extraction of fuelwood (particularly for production of charcoal) is a major cause of deforestation and forest degradation. Locally, this poses a real threat to the future of the forest resources, especially in situations where forest management is poor and unsustainable in the first place.

It needs emphasising, however, that with adequate forest management, supervision and control of management and trade practices, the growth in demand for fuelwood and charcoal does not have to lead to forest degradation. Some recent studies carried out in Niger and Mali, for example, indicated that control of the resource by the people living in the charcoal production areas can lead to proper management of the resource while at the same time improving local people's incomes (CIRAD, 2001).

The enormous, but normally little known, economic magnitude of the charcoal industry and trade were revealed by the following staggering figures in a report from Kenya in 2008 from the project "Miti Mingi Maisha Bora – Support to Forest Sector Reform in Kenya" where it was claimed that:

"The charcoal industry represents an estimated annual market value of Kshs 32 billion (USD 425 million) that is not visible to the government because of its informal nature. The government loses over Kshs 5.1 billion (USD 68 million) annually as a result of not having any regulatory and VAT tax collection mechanisms for the charcoal industry". What is equally interesting is the social and livelihood aspects of this production and trade: "The charcoal industry employs over 700,000 people who support over 2 million dependants. Where wood supply is not a constraint, fulltime charcoal producers can earn between Kshs 20,000 and 30,000 per month making it a well-paying proposition."

Since the 1970s, many countries in Africa have addressed this "woodfuel crisis" by adoption of a whole range of measures, e.g. more energy efficient stoves, better kilns for producing charcoal (the traditional earth kilns are enormously wasteful and it has been said that production efficiency can be improved up to five times from current levels if the right technology and processes are adopted), regulation of trade (even making it illegal), and by launching programmes to encourage substitution of charcoal with other fuels (particularly LPG and kerosene) through subsidies and provision of equipment to households. Some countries have introduced policies and legislation aimed at sustainable production and use of charcoal through proper management and planning of supply sources, together with rational trade and marketing infrastructures and efficient use. However, most of these programmes have not yielded much success, partly due to low adoption of new technologies related to production and use of charcoal, or by inefficient enforcement of policies and legislation aiming at reducing trade and use of fuelwood and charcoal..

There have also been concerns that substitution programmes have had the negative effect of creating unemployment in forest areas when charcoal production was discouraged. Lack of employment led to increased migration to urban areas, which actually accentuated the demand for fuelwood and charcoal, as these are the main source of affordable energy for urban poor people.

Globally, the use of wood fuels is steadily increasing at rates between 3 and 4 percent annually, partly as a result of population growth, but increasingly also as concerns are growing about the accelerating use of fossil fuels with accompanying increases in CO2 emissions contributing to climate change. The political and public interest in making shifts towards "green economies", however defined, has resulted in many industrialised countries trying to reduce the use of fossil oil energy by shifting more to wood and other forms of renewable energy. In Sweden, for example, there is a growing competition between the energy sector and the pulp- and paper industry for wood biomass. Much R&D efforts are going into new energy conversion technologies using wood

and by-products from wood, such as producing combustible gases or liquids. This interest in various forms of bioenergy has also resulted in an increasing international interest in large scale commercial production of various crops for energy. Obviously, this does not only apply to trees (e.g. Acacias and Eucalypts), palms (e.g. oil palm) and shrubs (e.g. *Jatropha curcas*) but also to agricultural crops such as sugar cane. This interest in bioenergy is rapidly creating both problems and opportunities in E and S Africa, in that large areas of land appears to be available for such investments.

There is need for African countries to review their wood energy policies in line with the above shift to environmentally friendly bioenergy developments, commercial opportunities and land competition. In doing so, it will be important to look not only at problems, e.g. deforestation and "land grabbing", but also on the many opportunities that a renewed focus on sustainably produced charcoal and other forms of wood energy creates for rural communities and individual farmer families, as well as for private sector commercial actors.

Project proposal

There is an almost endless number of studies conducted, and numerous research and/or development oriented projects, programmes, institutions, etc. working all over Africa on various angles of energy and wood all the way back since the 1970s. However, they have been (are) often restricted in geographic or agro-ecological area, social and economic contexts, type of technologies and consumption patterns studied, types of wood/forests used, special policy and legal aspects highlighted, etc. And most of them have their origin in the basic perception that firewood and charcoal use is a *problem* that must be reduced, either by reducing production or making consumption more efficient, rather than a *potential* to address poverty reduction and economic growth.

The current proposal is not to carry out yet another study but to make an in-depth review and synthesis of the existing level of knowledge and the current situation with regard to production, trade and use of wood as a source of energy in E and S Africa. Furthermore, the proposal aims at suggesting ways forward by which technology improvements and policy reforms may assist in overcoming problems and embracing potentials of using wood in different forms as a source of renewable energy. Furthermore, it is suggested that a major "E and S African Conference on Wood as a source of Energy" aiming at recommend ways forward through policy and technical resolutions. It is also envisaged that the project will contribute to creating more permanent political and technical platforms for continued exchange of knowledge and ideas related to wood as energy in the region.

Overall aims

To make an in-depth review and synthesis of the current situation and trends in the use of wood as a source of domestic and commercial energy in E & S Africa and, based on this, suggest policy, legislation and development directions for increased sustainable production of energy through wood, both through improved conventional forms of energy (charcoal) and through new technologies for converting wood to liquid or gaseous forms of energy.

Specific objectives and activities

- Carry out an in-depth review and synthesis of the current situation and trends in E and S Africa in production, trade and use of wood as source of traditional domestic and commercial energy (charcoal and firewood);
- Make an in-depth review of the potential of emerging technological developments for the use of wood as a raw material of renewable gaseous and liquid energy forms with emphasis on their potential for production and creation of benefits in E & S Africa;
- Make an assessment of what technical and policy developments and reforms are required to realise the potentials for increased sustainable production of traditional and new forms of energy using wood as a source; also assess the possible conflicts and synergies with other sectors, e.g. regarding land requirements, possibilities for multiple production systems, etc.

- Based on the reviews, analyses and assessments above, suggest policy and legislation directions with regard to wood as a source of present and future energy;
- Present reports and recommendations at a major regional workshop/conference "E and S African Conference on Wood as a Source of Energy".
- Based on the reports to, and the discussions/presentations at, the workshop/conference, produce a comprehensive "state-of-knowledge" report with indications of "ways forward" on wood as a source of energy; also produce relevant policy briefs on subjects coming out of the project.

Work-plan and activities

Summary of suggested activities, people and partners responsible and involved, and a suggested time plan for implementation of the activities are shown in tabular form below.

Activity description	Responsible people and partners; roles	Time plan
	African Forest Forum overall responsible, consultants and partners as indicated	2012-2013
1. In-depth review/synthesis of current situation and trends in E/S Africa in production, trade and use of wood as source of traditional domestic and com- mercial energy (charcoal and firewood); mainly based study of existing R&D reports, and by interviewing relevant programmes and institutions.		
2. In-depth review of the potential of new technological developments for the use of wood as a raw material of renewable gaseous and liquid energy forms with emphasis on their potential for production and creation of benefits in E & S Africa; mainly based study of existing reports, and by interviewing relevant experts and institutions.	AFF Senior Programme Officer (coordinator) Three regional consultants working as a team, each with main responsibility for 1,2 and 3; A supporting Expert Group set up to assist in planning and synthesis of findings Interact with relevant national, regional and international institutions, e.g. FAO, WWF, IUCN, UNEP, ICRAF and CIFOR	January-December 2012
3. Assessment of what technical/policy developments/reforms are required to realise the potentials for increased sustainable production of traditional and new forms of energy using wood as a source; also assess possible conflicts and synergies with other sectors, e.g. land requirements, multiple production systems, etc.		
4. Suggest policy and legislation directions with regard to wood as a source of present and future energy.	In addition to the same team of three above, strengthen by a natural resources policy and legislation expert	January-February 2013
5. Present reports and recommendations at a major regional workshop/conferen- ce - " <i>E and S African Conference on</i> <i>Wood as a Source of Energy"</i> .	AFF Secretariat overall responsible; partners and cosponsors of Conference will be approached; Consultants and Expert Group responsible for technical programme of, and presentation at, Conference	April/May 2013
6. Produce a comprehensive "state-of- knowledge" report with indications of "ways forward" on wood as a source of energy; also produce relevant policy briefs on subjects coming out of the project.	Team of three consultants, backed up by Expert Group and supported by AFF Secretariat and editorial service provider	May-November 2013

Possible partners to consult and invite to conference.

- Forest Agencies, Research Institutes, Energy Authorities, and some university departments in concerned countries; environmental and policy research institutes and think-tanks in the region, e.g. KIPPRA and TEGEMEO in Kenya, IRA in Tanzania, etc.
- Environment, energy and natural resources oriented NGOs, such as Environmental Alert, Farmers' and Land Owners' organisations, private sector companies in the energy filed; various National Forest Working Groups; apex bodies of local and/or commodity producer groups (e.g. charcoal producers);
- Regional and international institutions and organisations working on forests, wood for energy, natural resources and land use, etc., such as WWF, IUCN, ICRAF, CIFOR, IIED, Rights & Resources Initiative;
- Swedish and other possible partners, such as the Swedish Forest Agency and the Forest Owners' Association, SSC-Forestry Ltd. (Swedish forest certification company), private companies working with wood as a source of energy, some university institutions.

Project proposal 2:1

Inventory and monitoring of forest, wood and NWFP

resources

(Finalised 2011-04-09)

Background and justification

There is considerable uncertainty in eastern and southern Africa on the magnitude and dynamics of forest and tree resources, including trees outside forests - from biological, geographical and economic points of view. Old figures for forest area, tree coverage and "deforestation" are often quoted and repeated without any critical analyses of where they are taken from and the magnitude of trends and changes that have prevailed since the original figures were generated. Even for rather easy to measure things like area and standing volume of plantations established in the last, say, 30-40 years there are highly contradicting figures mentioned. Likewise, recent and apparently quite reliable studies of the charcoal production and trade in Kenya and Tanzania showed an economic importance of this business that vastly exceeded previous assumptions. Both problems and opportunities associated with this must now be reassessed but, at the same time, there is no mechanism put in place to continuously monitor the business. Another example is the almost complete lack of knowledge about volumes and origin of the rather substantial amounts of wood that goes into small-scale production of furniture. Not to mention the economic importance of trade in various NWFPs.

Most of the knowledge on forest and tree resources, and their uses and trends, that does exist emanate from a large number of uncoordinated studies, spread over time and space, carried out as research projects, studies by NGOs, and/or in foreign funded "development" projects. Some low resolution forest area inventories, based on satellite imagery, were earlier commissioned by FAO, but are of limited value both because they are not repeated regularly and because very little can be concluded from them about forest composition, quality and dynamics. In some countries, e.g. Tanzania, Zambia and Mozambique, more recent elaborate national forest monitoring and assessment programmes (NFMA) have been, or are still being, made with support from FAO. These have resulted in good baseline information and maps, but the problem is that there are rarely mechanisms, resources or capacity put in place to make regular follow-up inventories.

It ought to be a high priority for the countries of the E and S African regions to generate reliable and regular information on forest and tree resources (areas, species, wood volumes and growth, NWFPs, carbon, biodiversity, services, etc.), and to analyse and use such information for a variety of purposes. These may include improving planning the management of forest resources, developing relevant and effective policies, monitoring changes and trends, provide market statistics and trade flow analyses, measuring environmental influences, certification, and, not least, having mechanisms in place to satisfy the information needs associated with the many new climate, trade and environmental processes and schemes, such as CDMs, FLEGT, REDD and others. Good and transparent governance of forest resources, use and trade will be an elusive goal to achieve if reliable information is not available.

Since the 1920s, Sweden has had a National Forest Inventory programme and institutions to carry out the work. The methodologies have evolved and become continuously better over time, and many other factors are now also being measured apart from conventional tree and forest parameters, e.g. soil conditions, biodiversity, environmental factors, etc. It is probably safe to say that very few other countries in the world (Finland being one) has a similar high quality and precise knowledge of its forest and tree resources, and their dynamics, as Sweden. Much of the methods used, institutional set-up needed to carry out the work, and the generation and analyses of data, are applicable also to Africa and could form a very suitable basis for collaboration.

A regional approach would be most relevant for many reasons. It is, for example, quite expensive to build up, use and maintain both human capacity and physical and institutional ability to carry out regular and reliable inventories, and therefore it is much more economic to share such resources. Working on a regional basis will also make it easier to ensure that the same methods of collecting and analysing information are used. Finally, the fact that many of the major woody ecosystems – miombo, mountain forests, savanna woodlands and mangroves, as well as farm and agroforestry systems with much woody biomass – are shared between two or more countries in the

E and S African regions, speaks in favour of a regional approach. The most obvious institutional "parent organisations" for a capacity like this would be SADC and/or EAC, even if the technical home ought to be linked to an existing and well resourced forest research institute, forest department or forest university institution.

Project proposal

It is proposed that the project is implemented in two phases over a four-year period. The first phase (which is considered to be year 1 of the project) will mainly concentrate on setting the stage ready for phase II. Phase I will mainly involve consultations with experts, learning lessons from countries that conducted recently or are currently conducting inventory and monitoring of forests, engaging consultants to conduct a situational analysis and training needs assessments, and holding a stakeholders workshop. During the stakeholder's workshop, consultants will present for discussion and consolidation results of their studies and a draft work plan for phase II. The workshop will finalize the work plan for phase II.

Initially, funding is sought for the first phase, with very tentative and indicative figures of what might be required in a second phase. The first phase of the project is proposed to be coordinated and administrated by AFF, with relevant national, regional and international partners involved as indicated in the summary "Work Plan and Activities" table below.

Overall aim

To develop a programme for Swedish and other (e.g. FAO) institutions to work with partners in E & S Africa to build national and regional capacity to *inventory and monitor forest, wood and NWFP resources,* particularly the magnitude and dynamics of these resources from biological, geographical and economic points of view.

Specific objectives for and activities in phase I

In the first phase of one year's duration the specific objectives of the project will be to:

- Review experiences and lessons learnt from those countries in the region where inventories of forest and wood/NWFP resources have recently been done (or are on-going);
- Carry out a situational analysis of needs and challenges to establish good forest/wood resources inventories and monitoring mechanisms;
- Make a training needs assessment to address the needs and challenges the previous point; and,
- Present the results to, and get views from, regional stakeholders, and develop a more detailed plan for a second phase of the project.

This will be achieved by implementing the following activities:

- Organise a small initial working meeting with experts having recent experience of inventory work in the region to identify needs, lessons learnt and issues;
- Engage two consultant to address the first three points above; and,
- Organise a substantial workshop with concerned national, regional and international institutions to address point four above.

At this stage, AFF needs to look for funds to cover expenses for phase one of the project.

Possible objectives and activities in phase II

Components of a three-year phase II of the programme could include:

• Regional training and capacity building (in inventory and data analyses techniques, satellite and GIS technologies);
- Physical institution building, preferably at regional (SADC/EAC) level, including provision of hardware and software for inventory, mapping, information management and data bases, etc., adapted to regional conditions;
- Develop appropriate methods and tools for inventory and monitoring, and launch pilot projects to test these; and,
- Staff exchange programmes between E and S Africa on the one hand, and Sweden and other countries with well functioning forest resource inventory facilities and experiences on the other (in both directions).

Work-plan and activities

Below follows in tabular form a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities

Activity description	Responsible people and partners; roles	Time plan
Phase I	African Forest Forum overall respon- sible, consultants and partners as indicated	Jan-Dec 2012
1. Mini workshop to capture and docu- ment challenges and lessons learned from countries that recently conducted, or are currently conducting, inventory and monitoring of forests. Experts invol- ved to be invited to make presentations. The workshop will also recommend on what information to come out of the analysis and assessment below (2 and 3).	AFF Senior Programme Officer (coordinator); Two Lead consultants for points 2 and 3; c. 8 experts from countries with recent forest monitoring and assessment programmes; Experts from Swedish National Forest Inventory and FAO.	January – February
2. Carry out a situational analysis of challenges and needs at national and regional levels; make recommendations on regional institution building, methods to be used, hardware and software required, database management, etc., and propose a plan of action to imple- ment recommendations.	AFF Senior Programme Officer (coordinator); One lead consultant and nine national consul- tants to do review;	March - July
3. Conduct training needs assessment at regional and national levels, make recommendations on plan of action.	AFF Senior Programme Officer (coordinator); One lead consultant and nine national consultants to conduct the assessment;	March - July
4. Organise a stakeholder workshop of about 35 participants to receive, discuss and to provide inputs to improve, con- solidate and own the draft plans of action prepared by the Consultants	AFF Senior Programme Officer (coordinator); Two lead consultants and national consultants; Key people from selected countries and regional bodies; Swedish and international institutions as listed below.	September/October
Phase II (tentative activities)	Regional institutions responsible; AFF adviser; partners as indicated	Jan 2013 – Dec 2015
5. Organise an inception workshop.	Project Leader; c.25 experts from participating countries and regional organisations; five from outside (Sweden, FAO, etc)	February 2013
6. Organise and conduct two regional training workshops annually on topics identified through the training needs assessment in phase I.	Project Leader; c. 25 trainees from region; Selected resource persons from the region and outside (Sweden, FAO, etc).	Twice annually 2013-2015
7. Facilitate staff exchange between E/S Africa and Sweden and within African	Forest Inventory and Monitoring staff, 5/y	2013-2015

countries.		
8. Design, develop and operationalise a regional facility for inventory and monitoring of forest, wood and non wood resources.	Project Leader and institution development team; Sida and other Development partners	Plans and financing ready by 2014 Construction started 2015
9. Facilitate annual meeting of heads of forest institutions in the region (about 30).	Project Leader; Stakeholder regional and national institutions; Sida and other Development partners	October of each year

Possible partners to consult and collaborate with, and to invite to meetings.

- Regional organisations EAC, SADC, COMESA;
- Regional Centre for Mapping of Resources for Development (RCMRD, earlier the Regional Remote Sensing Unit; www.rcmrd.org) based in Nairobi, and the Southern Africa Remote Sensing Centre;
- Forest and Environmental Departments/Agencies, Forest Research Institutes, Departments at Universities with competence in fields relevant to resource inventories (forestry, remote sensing, GIS, resource economics, statistics, etc.);
- Forest Working Groups in countries with an nfp-process in place;
- Regional and international institutions with relevant programmes and experiences of forest resource inventories, e.g. FAO (already doing work in this field) and the NFP Facility (both these are already involved in discussions with Sida), CIFOR, ICRAF, ITTO (and ATO), WWF and IUCN, which have all done work in the field of resource inventories at forest and/or farm levels; IUFRO might provide inputs through its networks of forest research institutes dealing with inventories;
- The two obvious main Swedish partners are the National Forest Inventory at SLU's Forest Faculty and the Swedish Forest Agency; others may include the Wood Measuring Societies and the SSC-Forestry Ltd. (for aspects of certification and trade), and the institutions in the *Environment for Development* network in Gothenburg and East Africa (for economic analyses), and WWF-Sweden and the *focali* programme at Gothenburg University (for environmental monitoring and REDD aspects, respectively);
- Other possible technical and financial partners may include the European Forestry Research Institute, which is experienced in collating and analysing regional forest resource data; the European Commission, Finland, Norway, Switzerland and Germany.

Project proposal 2:2

Strengthening of forest research

(merged into SUA/SLU proposal)

Background and justification

The institutional basis for forest research is reasonably well developed in E/S Africa, both with respect to Faculties/Departments of Forestry at many Universities throughout the regions and Government Research Institutes and Centres. What is often lacking, however, are enough resources to adapt research programmes and priorities to changing needs and opportunities, and to renew staff competences in emerging areas and in sufficient numbers to effectively tackle up-coming research needs. This particularly applies to the many new challenges that require broader and more interdisciplinary research approaches to be effectively addressed, e.g. the climate-forest issues, the conflict for land for different uses, the value chain analyses needed to understand the income generating potentials of various forest/tree-derived products, economic/social/ecological aspects of plantation forestry, contribution to food security, and several others. An additional problem affecting many countries and their research systems are the skewed age distribution among active researchers, with a dominance of older staff and difficulties, both because of resource constraints and lack of attraction, to recruit young people into research careers.

Many of the emerging forest research issues mentioned above, in combination with the many remaining "conventional" research needs, are too large and resource demanding to realistically and effectively address them in each individual country. Instead, the most realistic and economic approach is to build up knowledge and capacity through regional efforts. This need not imply building up new regional institutions but rather to work through regional networks and programmes and using synergy opportunities and comparative strengths of national institutions to the benefit of the whole region.

One interesting approach to building research capacity, while at the same time generating knowledge on essential issues, is to work with "regional research schools" in forest sciences. Sweden has strong forest research institutions with considerable experience of working with African partner institutions, and at the same time also a need to build up its own research capacity in some of the emerging global issues (e.g. on the relation between forests on the one hand and climate, environment, poverty alleviation, etc. on the other). A research school can focus on one or more key group of issues, e.g. on all aspects of tree plantations, income generation from forests and trees, climate and other environmental services, etc., or it can be open as to topics that individual scientists chooses to pursue.

Discussions are well advanced between the Forest Faculties at the Swedish University of Agricultural Sciences (SLU) and the Sokoine University of Agriculture (SUA) in Tanzania to form an "axis" around which a network of institutions will be linked in a regional research school in eastern and southern Africa. It is also explored whether some other Nordic Forest Faculties might be participating. The proposal has the working name "Regional Forest Research and Training in Africa" (REFOREST Africa) and suggests to focus on some broad themes, such as "commercial forestry", "forest-agriculture-wildlife interactions" (land and food security issues), etc. The perceived and planned particular advantages of the suggested research school are:

- Emphasising **research of regional relevance**, thereby economising on scarce resources by exploiting comparative advantages among the participating institutions in addressing problems and opportunities shared among two or more countries;
- Increased *international exposure* for researchers and their institutions in E and S Africa through working with SLU in Sweden (and possibly other Nordic universities); intention is also to involve the many international institutions operating in the region in planning and implementing individual research projects, for example ICRAF CIFOR, FAO and WWF;
- Using *internships* for the PhD candidates as a tool to expose them to potential work opportunities and employing institutions, companies, NGOs, etc.;
- A strong emphasis in the curriculum and practical work on conveying *pedagogical and communication skills* to the PhD candidates; this is an area where SLU has considerable experience;

• There will also be emphasis on *multi- and interdisciplinary* studies and ways of working through wider collaboration with agricultural, economic and social scientists and research institutions in the region.

The AFF/KSLA project wholeheartedly endorses this initiative, which, if financially supported (the vision is shared financing from promoters, donors, private sector, government and universities), may involve developing programmes within three or more focal areas or themes; Ph.D. and M.Sc. research projects; research grants both to teams and individual scientists; institution building including physical facilities; workshops and conferences; all with an emphasis on regional problems and/or opportunities shared by many countries in E and S Africa. Degrees may be awarded by either of the two main partner institutions (it is also being explored if joint degrees can be awarded), and course, field and laboratory work will be carried out where most appropriate, but mainly in Africa.

Particularly focusing on areas requiring more interdisciplinary research approaches, e.g. climateforest issues, conflict for land for different uses, value chain analyses of income generating and poverty alleviating potentials of various forest/tree-derived products, economic/social/ecological aspects of plantation forestry, contribution to food security, others.

Overall aim

Through partnerships between African, Swedish and other institutions assist in,

- Increasing the number of researchers with a PhD degree and able to address emerging issues relevant to the contribution of forests and trees to social, economic and environmental development;
- Strengthen forest research institutions and faculties in their ability to address issues of regional relevance through collaboration and networking.

Main areas of intervention

- Develop/strengthen collaborative research teams and "regional research schools" in forest sciences, with emphasis on regional problems and/or opportunities shared by many countries in E/S Africa (cf. Sokoine-SLU proposal); consider "themes", e.g. environment/climate, income generation, and plantations;
- Ph.D. and M.Sc. research projects; post-doc positions and projects;
- Research grants, both to teams and individual scientists;
- Institution building including strengthening physical facilities;
- Training courses in research methodologies, refresher courses for research staff;
- Strengthen capacity for scientific publication, communication and dissemination of research findings:
- Workshops and conferences;
- Staff and student exchange programmes, internships.

Possible partners

African partners: Apart from the Forest Faculty at Sokoine University, also other Forest Faculties and Departments at Universities in the region, e.g. at Makerere (Uganda), Moi (Kenya), Wondo Genet (Ethiopia), Copperbelt (Zambia), Eduardo Mondlane (Mozambique), Botswana, Zimbabwe, Stellenbosch, Kwazulu Natal and Pretoria (South Africa), and appropriate forest research institutes (e.g. KEFRI and TAFORI); economics and environmental institutions in the EfD network.

Regional/international partners: the African Forest Forum (AFF) will have a role as a regional mentor/facilitator together with ANAFE; other relevant regional bodies and networks for research and higher education, e.g. IUCEA, AAS, FORNESSA, ASARECA, AFREA, FARA, RUFORUM, CARDESA and international organisations with regional programmes, e.g. ICRAF, CIFOR, IUFRO.

Swedish and other partners: Apart from the Forest Faculty of SLU, also the Agriculture and Natural Resources Faculty of the same University, Swedish Forest Research Institute, Gothenburg Environmental Economics Programme, Stockholm School of Economics, International Foundation for Science (IFS), and the Natural Resources Research Council (FORMAS), may be involved; other

institutions of higher learning and research in the Nordic countries and elsewhere with experience in the E/S African region (e.g. Forest Faculties and Departments at the Universities of Helsinki, Aas, Wageningen, Copenhagen, Bangor, etc.).

Work-plan and activities

Details are currently (Spring 2011) developed by SUA and SLU and partners in Africa and in the Nordic countries.

Project proposal 2:3

Building up Forest Certification capacity in Africa

(Finalised 2011-04-09)

Background and justification

Forest certification is a mechanism by which well managed forests are able to communicate information about the quality of the forest management to their markets. In order to achieve this, forest certification schemes are based on two strategic tools. Firstly, the schemes develop national performance standards which can be applied at the level of the forest management unit and which assure that forest management will be sustainable. These standards are developed in consensus by national forest stakeholders. Secondly, the schemes develop systems to inspect and evaluate the forest management against the standard and in cases where the forest management meets the requirements of the standard then compliance certificates are issued. Forest owners can then use these certificates to market their products.

Forest certification can be applied in a very wide range of forest environments from tropical high forests to arid open woodlands with 10% canopy cover as found in the Sahel region. The major forest certification schemes include both timber and non timber forest products (NTFPs). It is, for example, possible to buy certified chewing gum, brazil nuts and, in Tanzania, certified wattle bark extract and even FSC certified electricity. In addition, certification can be applied in agroforestry, e.g. for neem (*Azadiractha indica*) timber production in coastal areas of Kenya. One of the most commonly traded certified product is FSC certified honey and in many cases honey is certified as being fair traded, organic and from well managed forests simultaneously. Today, there are 16 FSC endorsed national initiatives in 16 countries in Africa.

Forest certification on its own cannot ensure commercial success and it is important that the forest product processing is also of a high quality. However, forest certification in combination with a high quality product can give access to high value markets. Pilot projects in which the entire production system is optimised including forest certification to facilitate market access are important to demonstrate what can be achieved.

In spite of the number of FSC endorsed products and a growing interest for certification in Africa, very small areas of managed forests and of trees outside forests are certified through any of the internationally accepted systems (FSC, PEFC, ISO), or the ITTO-developed Pan African Forest Certification System (mainly for high forests in West/Central Africa). The same applies to the trade in forest products, e.g. through the Fair-trade Labelling Organisation (FLO). The only substantial part of certified forest operations in Africa are those of commercial pulp and timber plantations in South Africa, where over 50% are certified. There are several reasons – the high cost of certification, no local bodies able to carry out certification, no need since neither the local market nor a substantial part of the export market (Middle East, neighbouring African countries or Asia) demand certified wood, etc. In addition, there is a widespread perception in Africa that certification is part of "Western trade barriers" to protect its own forest operations.

However, if African countries shall be able to realise the commercial potential that lies in the production, value adding and trade/export of wood and non-wood products derived from sustainably managed forests and tree plantations, there is little doubt that the degree of certification must increase significantly. In Sweden, where commercial forestry is totally dependent on the export of fibre and wood products, virtually all forest areas under active management are certified (actually, Sweden has the highest percentage of forest area being certified in the World). One of the major providers of certification services is the company SSC-Forestry Ltd. (Svensk Skogs-Certifiering AB), which has considerable operational experience and presence in Africa. They have already run several Sida-financed courses on certification in many countries and regions on the African continent and been involved in the rehabilitation of small scale sawmills and plantations. The training courses have included certification *per se* through various systems, fair trade, chain of custody, controlled wood, integration forest-industry-market, FLEGT, the development of national (or regional/eco-regional) standards of SFM, etc. More recently, also FSC-SLIMF ("*small, low intensity managed forests"*) to cater for certification of community and farmer production of trees has been included.

Project proposal

It is suggested that a project is carried out in two phases over a four year period. The first phase (of one year) would involve identifying and engaging an expert in forest certification as a Consultant to review the situation and generate an initial project draft for the second phase. In addition, a Task Force of 4-5 experts will assist by identifying more needs and opportunities and participate in a mini-workshop to consolidate the draft produced by the Consultant into a final project proposal. Phase one involves limited initial activities and could be accomplished in 2011. Phase two could then start in 2012, by initiating and implementing a range of activities addressing the overall aim in two pilot regions. This phase could start with two sub-regional inception workshops at which the project proposal prepared by the Task Force is presented, discussed and, if need be, improved further to be owned by stakeholders. The project will have an initial focus on Eastern and Southern Africa, although case studies and participants may also be brought in from West and Central Africa.

Initially, funding is sought for the first phase, with very tentative and indicative figures of what might be required in a second phase. The project is proposed to be coordinated and administrated by AFF, with relevant national, regional and international partners involved as indicated in the summary "Work Plan and Activities" table below.

Overall aim

To contribute to building up capacity in Africa to carry out certification of forest operations, products and trade, in order to promote SFM.

Specific objectives for and activities in phase I

In the first phase of one year's duration the Consultant will review the current status of forest certification in Africa and propose interventions. This will mainly be done through desk assessment s and contacts with institutions and individuals well informed on, or active with, certification issues. The specific objectives in phase one will be to:

- Review the current situation of forest certification in Africa;
- Identify opportunities and challenges related to certification of forest operations, products and trade;
- Analyse the institutional and technical needs required for applying forest certification in Africa;
- Propose recommendations for activities or interventions to apply forest certification in Africa,
- Formulate or design a three years project to build forest certification capacity in Africa which will form the bases for Phase two.

This will be achieved by implementing the following activities:

- Engage a Consultant to address the first four points above, and,
- Organise a Task Force of about 4-5 experts to address the last point above, i.e. to develop the consultant's recommendations into a project document for submission to development partners by AFF.

At this stage, AFF needs to look for funds to cover expenses for phase one of the project.

Specific objectives for and activities in phase II

The second phase of the project will focus on implementing activities that address the overall aim of the project and as will be detailed in the project document. The specific objectives of the project will be to:

• Train different stakeholders in certification in a broad sense at various levels for the management of forests, e.g. from forest departments, communities and private business,

- Develop national forest management standards, strategies and policies, etc to support and facilitate forest certification,
- Build up a capacity in Africa to undertake certification on a commercial and consultancy basis,
- Case development of improved products, processing and marketing based on certified wood sources linked to the rehabilitation of failed plantation schemes,
- Case development of timber and NTFPs production based on natural woodlands,
- Assist in linking certified products from Africa to regional and international markets.

This will be achieved by implementing the following activities:

- Organise an inception workshop,
- Conduct short courses on certification,
- Support development of regional and national standards, strategies and policies that could be adopted by individual countries,
- Support AFF to form and register a certification company,
- Engage consultant for case developments of improved products, processing and marketing based on certified wood sources linked to the rehabilitation of failed plantation schemes,
- Engage consultant for case development of timber and NTFPs production based on natural woodlands,
- Engage consultant to assist in linking certified products from Africa to regional and international markets.

In the second phase it is proposed that SSC-Forestry of Sweden and the group of Swedish and international partners they work with, are engaged as partners. They are already experienced in offering courses internationally on Forest Certification. In cooperation with Sida, SSC-Forestry has trained over 350 forest managers/experts from more than 60 countries in forest certification. It is proposed that a Training of Trainers (ToT) approach be used. A team of three or four interested and dedicated foresters be formed from each participating country, and these are supported to participate initially in a two weeks regional course on certification for training of trainers. During the training workshop, draft certification standards will also be generated that could be refined by individual countries in accordance to their specific needs. Of the two weeks, one could be used for field practical training and may include study visits, for example to certified plantation in South Africa, Zimbabwe, Swaziland, etc. For that reason, the venues for the workshops were practical training on forest certification could be easily and cheaply conducted need to be carefully identified.

It is thought that in each country, the team trained at regional level, will form the nucleus of forest certification by working to develop a draft of national standards for sustainable forest management for initial discussions during the national short courses and later by stakeholders. In addition, the team will work jointly with the Project Leader in provision of forest certification training at national level. Short courses are required at national level to create awareness for policy makers, forest managers, etc and to impart knowledge and skills for technical and field staff.

AFF is encouraged to form and register a company for forest certification to serve the continent and region, using experts trained through this project. Additionally, foresters trained by this project could be encouraged to register national or local forest certification companies.

Work-plan and activities

Below follows in tabular form a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities

Activity description	Responsible people and partners; roles	Time plan
Phase I	African Forest Forum overall respon- sible, consultants and partners as indicated	Jan-Dec 2011
1. Review current status, identify oppor- tunities and challenges, analyse insti- tutional and technical needs at national and continental levels, and make a draft proposal for a project to promote and	AFF Senior Programme Officer (coordinator) Lead consultant to do review;	2 months early 2011

apply forest certification in Africa.		
2. Organise a Task Force of about 5 experts in form of a mini-workshop to receive, discuss and improve the draft prepared by the Lead consultant into a project document for submission to development partners by AFF.	AFF Senior Programme Officer (coordinator) Lead consultant to present draft proposal; Task Force made up of 4-5 experts, possible input from Sweden by SSC-Forestry Ltd., SLU, etc.	Mid-2011
Phase II	African Forest Forum overall respon- sible, with partners as indicated	Jan 2012 – Dec 2014
3. Organise an inception workshop.	AFF Project Leader c. 25 key people from selected countries and 5 from outside at each of the workshops possible input from Sweden by SSC-Forestry Ltd., SLU; Other possible partners/participants: Pan African Forest Certification System (PAFC- ITTO), FAO, the NFP Facility, ATO; FSC Africa and PEFC international organisations; IFIA, IUCN, WWF, the Global Forest and Trade Network, ICRAF and CIFOR.	February 2012
4. Two regional short courses for Training of Trainers (ToT)	AFF Project Leader c. 20 key people from the region and 5 from outside at each of the workshops Possible input from partners as above.	March, July, 2012
5. National short courses/seminars training on certification	AFF Project Leader One short course (for technical) and one seminar (for policy makers), per annum; Resource persons from participants of the regional (ToT) events and possible partners.	2013-2014
6. Support AFF to form and register a certification company.	AFF Project Leader Consultants 3 p/m per year for 2013-2014.	2013-2014
7. Case developments of improved products, processing and marketing based on certified wood sources linked to the rehabilitation of failed plantation schemes.	AFF Project Leader Consultants 3 p/m in 2012	2012
8. Case development of timber and NTFPs production based on natural woodlands.	AFF Project Leader Consultants 3 p/m in 2013	2013
9. Linking certified products from Africa to regional and international markets.	AFF Project Leader Consultants 3 p/m per year	2013-2014

Project proposal 2:4

Analysing needs for improved technical level forestry training in E & S Africa

(Finalised 2011-04-09)

Background and justification

In the later decades of the colonial period, forestry schools for training of technicians (diploma, certificates) were established in many E & S African countries. These technicians came to fill many and very essential positions related to field management and protection of the national forest estates, both plantations and natural forests. Many also became involved with the sawmilling sector. In the early part of the post-colonial time (1960s and first half of the 1970s), before there were a sufficient number of academically trained foresters to take over managerial responsibilities from the departing colonial forest officers (and, to an extent, early secondments of senior foresters through various development collaboration efforts), these forest technicians were the ones that provided continuity and some stability in running and protecting the forest estates. In view of their importance, many of the forestry schools were supported for some, or many, years in the period 1970-2000 by various external donors. For example, NORAD supported the Nyabyeya Forest School in Uganda, GTZ (Germany) the Kenya Forest College Londiani, Sida the Forest Training Institute Olmotonyi, Tanzania, and the Wondo Genet College of Forestry in Ethiopia (that later became an academic Faculty of Forestry). In the SADC region, FINNIDA provided substantial support to the forestry training sector in the 1980s and 90s. Also new colleges were established in the region, e.g. Kitabi College of Conservation & Environmental Management (KCCEM) in Rwanda.

When the support was gradually reduced, starting in the late 1990s, and the simultaneous pressure from the international finance institutions to reduce public spending started to have an effect, many of the Forestry Schools experienced severe problems. The turn-out of forest technicians at various levels dropped considerably. Today, as shown in recent studies by ANAFE, the number of foresters trained with any form of practical knowledge on how to lead work on nursery establishment and management, plantation establishment, silviculture operations, logging, forest protection, wood industry operations, extension work, etc., in the field is severely reduced all over the two regions (as well as in other parts of Africa). The fact that the turn-out of academically trained foresters, who have neither the skills nor the willingness to take on the many practical hands-on tasks that the forestry technicians normally handle, have continued to increase, has lead to a very top-heavy personnel structure in forestry in many countries. It is like an education system with only university lecturers but no primary or secondary school teachers, or like an army with only generals and privates!

In view of the increased importance of opportunities and problems associated with forests and trees today - income generation for farmers and communities, climate change mitigation and adaptation, provision of energy, enhancing food security, hydrological and other environmental services, ecotourism, wood and NWFP processing and trade, etc. - all of which will require handson ability to work with trees and forests, more forest technician are urgently needed. Apart from "traditional" technicians' training in forest management and protection, a new breed of forest technicians will also need to have skills in extension and development work with farmers and communities, how to communicate information to such audiences, inventory and assessment skills in relation to various certification and fair trade schemes, "clean development mechanisms" (CDM), "voluntary carbon markets", REDD (and REDD+), and other mechanisms that will require considerable back-up work on the ground. Another requirement will be for technicians who can manage, or assist communities and NGOs to manage, small scale wood- and NWFP-based industries and trade. Actually, it is not wrong to see a modernised forest technician training as a very suitable back-ground for entrepreneurs in the forestry, tree and wood sectors. In general, the potential job market for forest technicians ought to be much wider than in the past, when virtually every graduate went into government service. The development of curricula should take this into account in order to be relevant.

In Sweden (as well as in Finland), forest guards, technicians and engineers, have always played essential roles in managing forests and forest operations. The training and education of these categories have gradually adapted to changing needs and opportunities in the professions and the quality of the schools providing such training is today very high. Many have been involved with

training also of students from Africa. The School of Forest Engineers at SLU, for example, has had a long and intensive twinning arrangement with the Wondo Genet College of Forestry in Ethiopia.

The mini-meeting of Principals of Forestry Colleges in the region, mentioned in the Introduction above, summarised the current situation by identifying the following key challenges:

A. Human resources	 Lack of scheme for service for tutors; therefore staff recruited as forest officers and assigned to teaching responsibilities; Inadequate pedagogical skills; Weak practical skills of staff; Limited professional exposure; Poor conditions of service and incentives to motivate tutors, leading to poor retention; Limited/lack of opportunities for relevant refresher/skill development courses; Lack of networking among colleges/teachers in the field of natural resources management; Shortage of technical and support staff; High turn over of trained, skilled and experienced staff;
B. Financial	 Low sustainable financing of colleges; Lack of investment/business plans for most colleges; Lack of incentives for self-generating income; Inability of students to pay fees; Fees do not reflect real costs;
C. Students	 Low enrolment of students; Low qualification of students; Lack of scholarships and or loans for technical students; The application to technical colleges is an after thought option; In all colleges, there is gender imbalance;
D. Infrastructural/ Technical/Technological	 Old buildings in most colleges; Poor and aging facilities including transport, communication, etc; Inadequate boarding and teaching facilities (dormitories, nurseries, lecture theatres, forests, laboratories); Lack of GIS and remote sensing equipments; Poor internet connectivity; Poorly stocked library;
E. Teaching materials	 Lack of relevant teaching materials, tools and equipments; Inadequate computers, reference books, chemicals, etc.;
F. Administration/ management	 Weak management structure of the college; Poor coordination and networking among technical forest and natural resources colleges; Lack of a standard technical qualification framework; Technical training is not highly prioritised in financial allocation;
G. Curricula development/ review	 Non-responsive curricula: focused on knowledge and only limited skill development; not addressing emerging issues (climate change, biofuel, Bioenergy) and challenges in the sector; insufficient interaction with the professional sectors (private and public and community); inadequately address non timber forest products, trees outside forests, communication and managerial skills; not cascaded to community based natural resources management; Lack of regular reviews; Overloading of curricula after review calls for prioritisation; Lack of harmonized and standardised curricula within the regions;
H. Others	- High mortality of skilled and experienced foresters due to AIDS;

In order to address some of these challenges, a project described below is proposed.

Project proposal

It is suggested that a project is carried out over a three-four year period. The first year would mainly comprise an in-depth situation analysis of technical training challenges and needs through analytical studies, a set of workshops at which the studies are presented and discussed and then,

based on this, initiate a range of activities addressing the overall aim below. The project is proposed to be coordinated and administrated by AFF, with relevant national, regional and international partners involved as indicated in the summary "Work Plan and Activities" table below.

Initially, funding is sought for the first phase, with tentative and indicative activities and figures of what might be required in a second phase. Findings of studies that will be conducted and information that will be collected in phase I will be used to consolidate the plan of action slotted in phase II. The stakeholders' workshop also proposed among the activities of phase I will finalise a plan of action for phase II and create ownership.

Overall aim

The primary aim is to strengthen and modernise forest technician training in E & S Africa at all levels, by identifying and initiating concrete actions, at national and regional levels, that will contribute to sustainable forest management.

Specific objectives for activities in Phase I

- Carry out a **situation analysis of the challenges and needs** of forest technician training in the region (national and regional);
- Make an in-depth analysis of technical training needs at different levels and for various institutions and purposes (Governments, NGOs, extension to farmers and communities, small-scale industries, trade and business in wood and NWFP products; ecosystem services, etc.);
- Based on this, draw up a plan of action to strengthen and make forest training relevant in E & S Africa, e.g. by developing modules and curriculum frameworks adaptable by countries and draw a plan for the development of joint regional programmes;

These objectives will be achieved by implementing the following activities:

- AFF to engage one Lead Consultant and nine National consultants to carry out a *situational analysis of challenges and needs of forest technician training* at national and regional levels in E&S Africa, and make a draft proposal for a plan of action to strengthen and modernise these. In addition, the consultants will also be expected to compile best practices and lessons learned on pedagogical skills; identify needs and make recommendations on internet connectivity, GIS and remote sensing and library books and other reference materials.
- AFF to engage one Lead Consultant and nine National Consultants to make an in depth assessment of technical training needs at different levels and for various institutions and purposes and make recommendations on a plan of action. In addition, the consultants will conduct case studies to document the actual cost of forest training in the region and will identify needs for new programmes in each country.
- AFF to engage one consultant to develop a database for colleges, staff profiles and skills available in the region. Identify gender based networks and female role models that could be engaged to promote female enrolment in forest colleges. This can be combined in the terms of reference for national consultants for one of the activities stated above, and increase allocated time.
- AFF to organise a stakeholder workshop of about 30 participants to receive, discuss and to
 provide inputs to improve, consolidate and develop ownership of the draft plans of action prepared by the Consultants

Specific objectives for activities in Phase II

- 1. Enhancing collaboration and networking between institutions in the region.
- 2. Initiate some key activities and launch a regional programme that will include capacity building of staff at the training institutions, study visits and staff exchange programmes to relevant institutions in other countries.

3. Sensitise decision makers on emerging issues and challenges of technical forestry training in the region.

These objectives may be achieved by implementing some or all of the following types of activities:

- Facilitate regular meetings of heads of forest institutions in the region;
- Conduct an inventory and develop databases for college and staff profiles and skills;
- Promote joint activities, i.e. curricula review, short courses, staff exchange;
- Facilitate development of college business plans and teaching manuals in the region;
- Facilitate procurement of selected reference materials, teaching tools and equipment;
- Develop teaching modules on emerging issues, including HIV/AIDS, and regional guidelines for curricula structure and review, to facilitate standardisation;
- Facilitate staff attachments to relevant institutions/professional organisations (national/international), including part time engagement of Swedish experts and study tours to Sweden;
- Facilitate curricula harmonisation for credit transfer between collages and Universities;
- Develop and conduct regional refresher courses including pedagogical ones;
- Identifying and engaging gender based networks and NGOs to promote female enrolments in forest colleges, identify female role models in the forest sector.

Possible/potential partners

Forest Colleges in the region: Forest Training Institute, Olmotonyi, Tanzania; Nyabyeya Forest College, Uganda; Malawi College of Forestry and Wildlife; Kenya Forest College, Londiani; Zambia Forest College, Mwekera; Zimbabwe College of Forestry, Mutare; Chimoio Agricultural College, Manica Province Mozambique; Kitabi College of Conservation and Environmental Management (KCCM), Rwanda; and Forest Industries Training Institute, Moshi, Tanzania.

Other collaborators in the region: Ministries responsible for forests and forest training; existing forest faculties at Universities; Forest Departments/Agencies and research Institutes; professional foresters' associations, etc.

Regional/international partners: African Forest Forum as coordinator; Secretariats of EAC and SADC; ANAFE, CIFOR, ICRAF and FAO.

Work-plan and activities

Below follows in tabular form a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities

Activity description	Responsible people and partners; roles	Time plan
Phase I	AFF overall responsible; consultants and partners as indicated	Jan-Dec 2012
1. Carry out a situational analysis of challenges and needs at national and regional levels; make draft plan of action to strengthen and modernise forest colleges in E&S Africa. In addition, compile best practices and lessons learned on pedagogical skills; identify needs and recommendations on internet connectivity, GIS, remote sensing and library books, reference materials, etc. Conduct inventory and develop data- bases for colleges and profiles and skills of staff.	AFF Senior Programme Officer (coordinator) Lead consultant and 9 national consultants to do review;	Three months for Lead consultant 1.5 months each for national consul- tants; early 2012
2. Make an in depth assessment of technical training needs at different levels and for various institutions and purposes and make recommendations	AFF Senior Programme Officer (coordinator) Lead consultant and 9 national consultants to conduct the training needs assessment;	One month April -May 2012

on plan of action. In addition, conduct case studies to document actual cost of forest training in the region and identify needs for new programmes in each country.		
3. Organise a stakeholder workshop of about 35 participants to receive, discuss and to provide inputs to improve, consolidate the draft plans of action.	AFF Senior Programme Officer (coordinator) Lead consultant and 9 national consultants key people from selected countries and 5 from outside, input from Sweden by SLU; FAO; ICRAF; ANAFE; FINNIDA; GTZ, etc	In June/July 2012
Phase II	AFF overall responsible; with partners as indicated	Jan 2013 - Dec 2015
4. Facilitate regular meeting of heads of forest institutions in the region (c. 25)	AFF Project Leader; Deans of Forestry Faculties, Heads of Forestry Colleges, Directors of Forestry	Once a year starting from 2013
5. Promote joint activities, i.e. curricula review, short courses, staff exchange;	AFF Project Leader; Principals and staff of Forest Colleges	Throughout the project period
6. Facilitate development of college business plans and teaching manuals in the region;	AFF Project Leader; Colleges supported by AFF and consultants to develop or review business plans and to prepare teaching manuals,	Throughout the project period
7. Facilitate procurement of selected reference materials, teaching tools and equipment;	AFF Project Leader; College Principals	Throughout the project period
8. Develop teaching modules on emerging issues, including HIV/AIDS, and regional guidelines for curricula structure and review, to facilitate standardisation;	AFF Project Leader; Consultants to prepare teaching modules and regional guidelines	Throughout the project period
9. Facilitate staff attachments to rele- vant institutions/professional organisa- tions (national/international), including part time engagement of Swedish experts and study tours to Sweden;	AFF Project Leader; Principals and staff of Forest Colleges, SLU	Throughout the project period
10. Facilitate curricula harmonisation for credit transfer between collages and Universities;	AFF Project Leader; Lead Consultant and Colleges and Universities	2013/14
11. Develop and conduct regional refresher courses for tutors, including pedagogical (one for EAC and one for SADC annually);	AFF Project Leader; Resource persons, Tutors	Throughout the project period
12. Identify and engage gender based networks and NGOs to promote female enrolment in forest colleges; identify female role models in the forest sector.	AFF Project Leader; Identified networks and female role models	Throughout the project period

Project proposal 2:5

Facilitating the up-grading of tree seed germplasm improvement in Eastern and Southern Africa

(Finalised 2011-04-09)

Background and justification

It is recognised that the use of improved tree seed germplasm will normally enhance quality, productivity, resistance to pests and diseases and adaptation to possible climate change. It would also ensure sustainable supply of forest goods and services and contribute to reduced deforestation. Availability of improved germplasm will promote its commercialisation and exchange within the region. Current afforestation, reforestation and agroforestry activities are mostly characterised by the use of poor quality germplasm resulting in poor performance, low productivity, susceptibility to pests and diseases and, possibly, low resilience to climate change effects.

Early work (before 1950) on trying different tree species, both exotic and indigenous ones, for plantation establishment in E & S Africa were quite often a matter of trial and error. Seed was collected in countries or places of origin (Central America, SE Asia, Australia, etc.) and seedlings were raised and planted in several locations, both for trial purposes and for large scale applications in plantation schemes. In some cases, tree species had been introduced into the region even earlier, e.g. timber such as *Cupressus* to South Africa, teak in Tanganyika, and various *Eucalyptus spp.* for firing the trains on the railways established in the region in the first decades of the 1900s. Much valuable information, some unfortunately forgotten, was generated in these early attempts to move germplasm and establish plantations, e.g. that very few of the valuable indigenous timber species were suited for plantation growth, either for ecological reasons or because they grew very slowly (with a few exceptions, e.g. *Vitex keniensis*).

In the period 1950 to 1980, i.e. in late colonial and early independent years, there were determined efforts to build up Government forest plantation estates in many countries in the region e.g. Kenya, Tanzania, Uganda, Malawi, Zimbabwe, and Zambia. At the same time, private forest companies in South Africa, Swaziland and Zimbabwe also established large commercial plantations for timber and pulp wood. These investments were supported by major efforts to improve the supply of high quality tree seed and germplasm from a large number of species and genera (Pinus, Cupressus, Eucalyptus and Acacia spp., among others). Tree improvement programmes were launched at national, regional and international levels, both focussing on finding suitable provenances for introduction from the home ranges of different species and by identifying "plus trees" to form the basis for seed production. In E Africa, this work was mainly done by the East African Agriculture and Forestry Research Organisation (EAAFRO), in collaboration with national Forest Departments. Internationally, much of the trial work (e.g. extensive multi-location provenance trials), was coordinated by the Commonwealth Forestry Institute (CFI) in Oxford, some also by the Danish Tree Seed Centre (teak and SE Asian pines). Today, EAAFRO and CFI are both closed, the knowledge and experience built up has been scattered (people who were involved are either gone or retired), and national forest institutions (be they forest departments, research institutes or forest faculties) have very weak, if any, programmes related to systematic commercial tree seed and germplasm improvement. The main remaining knowledge rests with the commercial forest companies in South Africa (from where the many new plantation schemes in Mozambique, for example, derive their seed).

In the last two decades, since the late 1980s, there has been an increasing effort in many parts of Africa, including E & S Africa, to identify and improve (mainly through selection) various "multipurpose" trees for uses aiming at producing goods and services to improve the economic and/or ecological conditions in farming and rangeland systems. Much of this work has been initiated, led and coordinated by ICRAF together with several national forestry and agricultural research bodies. Many valuable results have been obtained in domesticating fruit trees, or getting better seed material and increased use of fodder, fuel and "fertiliser" trees. However, the fact that much of the work is (or has been) funded through special, time-limited project grants, together with the uncertainty in many countries of where the national institutional responsibility for continued improvement and production of multipurpose trees for agro-forestry should lie – with forestry or agricultural institutions – have resulted in limited institutionalisation and, thereby, sustainability of these efforts. The current challenges and opportunities facing the forest and tree sector in E & S Africa – income generation through wood and NWFP production at farm and community levels, climate change adaptation, commercial level production of timber and fibre for domestic and export markets, using trees to increase food security (income, fertility, fruits, etc.), and others – will require a functioning provision on a large scale of high quality tree germplasm. The risks associated with *not* having access to seed of known quality and properties will potentially be very damaging. Farmers and communities convinced to put money and effort into tree planting, only to find that they raise trees of inferior quality that nobody wants to buy, can easily jeopardise the belief in trees as something worth investing in. The gradual adaptation of livelihood systems to a changing climate will require knowledge on how different tree species and provenances cope with increasing temperatures and/or changing rainfall patters. Large scale commercial plantation schemes can be wiped out if seed sources are used with limited resistance to known pests and diseases. The contents of various useful and harmful chemical compounds of non-wood forest products (for food and medicines, for example) are normally genetically determined and, therefore, knowledge about such variation between different provenances can spell success or failure. Several more examples can be mentioned.

The point is that without a thorough knowledge of the properties of various tree seed sources, a technical and scientific ability to improve such properties through selection and/or breeding, and a practical and institutional capacity to multiply and distribute seed of high and known quality, many ambitious forest/tree related initiatives will be futile. In short, there is an urgent need to revamp both the technical and infrastructural capacities of Tree Seed Centres, Tree Improvement programmes, and commercial and public seed multiplication and distribution/sale mechanisms.

Project proposal

Apart from having been through the same regional consultation process and discussions at the two sub-regional workshops as described in the Introduction above, this project proposal has also benefited from inputs made by a small meeting of experts held in Nairobi on 15-16 November 2010. The meeting brought together eight people responsible for tree seed institutions and programmes from five countries in E and S Africa. The proposal below is the result of these consultations and meetings. Basically, it has two phases, an initial one year phase comprised of two sub-regional studies, a regional workshop and some initial capacity building/training activities, and a second, longer, phase aiming at developing and consolidating the institutional and technical capacity required to ensure a long-term and sustainable supply of improved tree seed germplasm in the region. Only the first phase is elaborated here with activities, work plans and budget, since the second phase will depend on the outcome of the first. There will be synergies between this project and some other AFF led activities, e.g. the project on restoring public plantations, currently being implemented by a team of regional experts.

Overall aim

Assess the current status of tree germplasm improvement, production and supply in Eastern and Southern Africa, and draw up a plan for and initiate pilot activities to revamp institutional capacities to enhance the genetic quality of propagules used for forestry programmes.

Specific objectives for and activities in phase I

The first phase of two years' duration of the project will involve reviews, a workshop and some initial training activities addressing the overall aim above. It will also result in the development of the second phase of the project. The specific objectives will be to:

- Review the current situation of tree germplasm improvement, production and supply.
- Analyse the institutional and technical needs to ensure sustainable production and supply of improved tree germplasm.
- Improve technical skills for tree improvement, seed production and handling.
- Develop Regional protocols for the tree seed handling for possible adoption by the International Seed Testing Association (ISTA).
- Design a long term project to develop and implement the priority actions defined during the first phase.

This will be achieved by implementing the following activities:

- Undertake an inventory of seed sources and tree improvement research in selected countries (Kenya, Tanzania, Uganda, Rwanda, Ethiopia, Zimbabwe, Zambia and Mozambique) by expert consultants.
- > Analyse institutional needs and make recommendations for improvements; by consultants.
- > Develop curricula for training activities (two short refresher courses for technical staff).
- Carry out training on tree improvement, seed production and management; by regional resource persons/experts in Tree Breeding (training in Zimbabwe).
- Carry out training on seed collection and handling; by regional experts, i.e. Tree Seed technologists, from within the region (training will be in Tanzania or Kenya).
- Compare and document tree seed handling procedures of priority species.
- Convene a small regional workshop to share the experiences and develop a long term project proposal aiming at providing adequate high quality tree germplasm in Eastern and Southern Africa.

Work-plan and activities

Below follows, in tabular form, a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities.

Activity description	Responsible people and partners; roles	Time plan
Phase I	African Forest Forum overall respon- sible, consultants and partners as indicated	2011
1. Undertake an inventory and in-depth review of the current situation with regard to the supply of high quality tree seed sources and tree improvement research in these countries: Kenya, Uganda, Rwanda, Tanzania, Ethiopia, Zimbabwe, Zambia and Mozambique.	AFF Senior Programme Officer (coordinator) Lead Consultant + 8 national resource persons. Partners: relevant Government Institutions in the eight countries; SADC Forestry Tree Seed Centres Network, SADC Plant Genetic Resources Conservation Network; ICRAF's networks in SA and EA for agroforestry trees	February-April
 Analyse institutional and technical needs and make recommendations for improvements; 		
3. Develop curricula for training activities (two short refresher courses for technical staff)	AFF Senior Programme Officer (coordinator) Two experts from region (one for tree seed technology, one for tree improvement)	May-June
4. Carry out training on tree improve- ment, seed production and manage- ment; by regional resource persons/ experts in Tree Breeding (training in Zimbabwe).	AFF Senior Programme Officer (coordinator) Three resource persons from region One week course for 16 participants (two from each country)	August
5. Carry out training on seed collection and handling; by regional experts (Tree Seed technologists) from within the region (training in Tanzania or Kenya).	AFF Senior Programme Officer (coordinator) Three resource persons from region One week course for 16 participants (two from each country)	September
6. Compare and document tree seed handling procedures of priority species.	AFF Senior Programme Officer (coordinator) One resource person/expert from each country National institutions partners	July-October
7. Convene a small regional work-shop to share the experiences and develop a long term project aiming at providing adequate high quality tree germplasm in Eastern and Southern Africa.	AFF Senior Programme Officer (coordinator) Consultants responsible for studies under 1 and 2 above to do presentations 20 participants	November

Project proposal 3:1

Empowering producer stakeholders

(Finalised 2011-04-10)

Background and justification

The potential for individual small- and medium-scale farmers and for rural communities to manage trees and forests for income generation is often limited because of lack of technical knowledge of tree/forest management, limited access to technology and inputs, little understanding of opportunities for value adding and of market chains and mechanisms, and weak organisations to enhance the interests and negotiating powers of the farmers/communities. Government Services, including the "new" and decentralised Forest Agencies, are still not effective in supporting communities and farmers. Most work, so far, has been done under the leadership of various international and local NGOs, often with good intentions but with limited sustainability (often based on short-term project funding from donors and other supporters). With very few exceptions (SAFIRE being one), such stakeholder producer groups have no influence on their respective Governments' positions on forest issues in international negotiations, even if the outcome of those can directly influence their work.

In Sweden, there is considerable, long and successful experience of building up strong forest owners' associations. This applies to organisational strengths, technical know-how, strong market positions, involvement in secondary value adding industry, and ability to influence policy. Some of this experience could, with relevant adaptation, be applicable also in Africa.

The suggestion is to develop a programme in which Swedish and possibly other external institutions and organisations will work with partners in eastern and/or southern Africa to help building organisational, technical and business capacity of tree growers' and community forestry associations involved with primary production of wood and NWFPs, value adding and trade. This is in response to the growing number and influence of such associations in eastern and southern Africa. For example, in Uganda, the Uganda Timber Growers' Association (UTGA) and the Uganda Network of Collaborative Forest Management Associations (UNETCOFA) have been playing central roles in the expansion of plantations in that country. In Kenya, strong community forestry associations (provided for under the new forestry legislation), led by a national apex body, the National Association of Community Forestry Associations (NACOFA), are also central to community involvement in forest management.

A programme to achieve such capacity building can involve many alternative and supplementary components, e.g. regional training courses in a variety of relevant subjects, policy analyses to identify best ways forward, market and market chain analyses, building up institutions and/or networks (regional or national) for technical support of producer associations and cooperatives, establishing twinning arrangements and other agreements for long-term support and knowledge exchange between Swedish and African partners, and others. However, before such a programme can be meaningfully designed, a more in-depth analysis ought to be done on the current situation, problems and potentials.

Project proposal

Thus, in order to systematically address the issue of building capacity of producer stakeholders it is proposed that an *outlook study* is carried out in 2011. It will be a stand-alone, in-depth analytical study of the current situation with regard to forest/tree producer stakeholders, an identification of needs and opportunities to organise and strengthen these stakeholders in managing forest and tree resources, and in positively influencing, and benefiting from, policies, markets and legislation. Apart from this outlook study itself, it is also proposed that a regional workshop (for stakeholders and other partners) in eastern and southern Africa be held, where the study with its findings and recommendations are discussed. The output from the study and the workshop can then be used by AFF and all other interested national, regional and international partners as they deem best. The detailed design of a more substantive capacity building programme would be derived from priority actions and activities needed in relation to achieving the overall aim stated below.

It is further proposed that the outlook study is carried out by AFF in partnership with the Swedish **Forest Initiative** (FI) that will appoint the Department of Forest Products (SP) at the Swedish Agricultural University (SLU) to provide inputs into the study. The FI is a programme with three partners, viz. the Swedish Forest Association, the Swedish Forest Agency and Sida with general purposes of strengthening forestry's contribution to development and poverty reduction by adapting relevant Swedish knowledge and experience to conditions in other countries. The five priority areas for FI's work are: i) the role of forests in poverty reduction and climate change, ii) the role of the private sector in poverty alleviation, iii) institution building, iv) outlook studies, and v) capacity development in Sweden. FI will, apart from providing funding for the study, also be responsible for arranging seminars in Sweden where the outcome of the study will be presented, and for administrating the input by SP/SLU in the study.

Overall aim of the medium-term AFF project

To empower forest-based producer stakeholders in east and southern Africa through building and strengthening their technical, organisational and marketing capacity in partnerships with relevant Swedish and other institutions.

Overall objectives of the outlook study

- To increase the understanding of strengths, weaknesses, opportunities and threats for different types of forest/tree producer groups in east and southern Africa for economic and social development and poverty reduction.
- > To use the study to assess the nature of support needed and solicit assistance for consorted action to strengthen the capacity of these different forest/tree producer groups

Specific objectives for and activities of the outlook study

The outlook study will comprise in-depth analyses of the current situation and on needs and opportunities related to strengthening the capacity of forest/tree producer stakeholder groups. It will be conducted as a series of case studies, with a focus on groups in all or some of the six countries that were the focal countries for the first phase of the current programme, i.e. Ethiopia, Kenya, Uganda, Tanzania, Zambia and Mozambique. The case studies will the form the basis for an analytical synthesis report, which will be the main substance of the outlook study.

It is assumed that the case studies will be geographically spread to include various production and user right systems, with one to three producer stakeholder organisations in each of the six countries, i.e. in all c. 10-12 cases. These cases will include community-based producer organisations, farmer tree grower cooperatives (e.g. the VI Agroforestry Programme), outgrower schemes, special production groups (e.g. charcoal, honey, wood craft, etc.), and other relevant organisations

The study will be carried out by a team of two African and one Swedish experts, supported by the AFF and SP/SLU. A regional workshop to identify priority actions based on the outlook study will be organised. The study will also be presented at a meeting in Sweden. Specific objectives include:

- Inventory and describe the current status of existing stakeholder groups already involved with products derived from forests and trees (including NWFPs; note that part of this has already been done in bits and pieces, but there is a need for a consolidated analytical summary report and also a need to get an overview of all actors and projects involved with forest and tree producer initiatives;
- Identify policy, legal and market constraints and opportunities for realising the potential of a select number of these stakeholder groups;
- Identify technical, managerial and organisational weaknesses and suggest ways of overcoming these for the same select number of groups;
- Present reports and findings/recommendations at a regional workshop in E/S African; the workshop will identify priority actions to improve capacities of producer stakeholder groups, including possible roles of Swedish and other external partners in achieving the goals of such actions;
- > Present outcomes of the outlook study in a seminar in Sweden arranged by FI in October 2011.

> Identify potential partners and opportunities to contribute to overall project goal achievement.

Work-plan and activities

Below follows, in tabular form, a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities.

Activity description	Responsible people and partners; roles	Time plan
1. Study and inventory current status of forest/tree producer groups, and assess constraints, needs and opportunities for strengthening their capacity.	Team of experts/consultants (2 African and one Swedish), coordinated by AFF Senior Programme Officer;	During first 6 months of project, March-August 2011
2. Regional workshop for E/S Africa to present findings of outlook study and elaborate priorities for actions and interventions by AFF and other partners.	AFF organises the workshop; report by consultants presented; participation by relevant national and regional groups and institutions, NGOs, private sector (see below).	September/October 2011
3. Conference and seminars in Sweden to present outcome of study and work- shop in Africa and identify collaboration opportunities.	Forest Initiative (SI) organises meetings; Two African consultants and responsible staff member from AFF participate.	October 2011

Possible partners to consult and invite to workshop.

- First of all, where community forest management and/or tree grower associations already exist they are obvious partners; e.g. NACOFA, UTGA and UNETCOFA; national CBNRM forums; some private sector players, e.g. Honey Council;
- National Forest Services in the regions with mandates to support community and farm forestry and tree growing activities;
- Agricultural extension services with trees and agroforestry aspects in their mandates;
- Strong NGOs (e.g. SAFIRE) and rural development programmes (e.g. the Vi Agroforestry Programme) active in supporting local people by promoting forest and agroforestry activities;
- > Various Forest Working Groups in countries with an nfp-process in place;
- Some forestry research, training and educational institutions;
- Regional and international organisations and networks operating relevant activities in the region, e.g. IUCN, WWF, FAO, ICRAF, IIED, NGARA; also the formal political and economic regional bodies, where these have forest or forest products trade on their agenda, e.g. EAC, COMESA, SADC, the Lake Victoria Basin Commission;
- Possible relevant Swedish partners would include the Federation of Swedish Forest Owners, the Swedish Forest Agency, some departments of the Forest Faculty of SLU and the University of Gothenburg, and networks operating from these (Agri4D, EfD), the Swedish Cooperative Centre (SCC), under which the Vi Agroforestry Programme operates.

Project proposal 3:2

Income generating and poverty alleviating potentials of forest and tree products and services

(Finalised 2011-04-10)

Background and justification

The forest/tree/wood/NWFPs "sector" has a significant, but little known and largely not quantified, role to play in the economies of African states. Many local and product-specific studies in recent decades, e.g. on charcoal markets and for several NWFPs (e.g. honey, marula oil, sheabutter, *Prunus africana* bark, etc.), consistently show that there is a big income generating and poverty alleviating potential in the production, value adding, transport, trade (both internal and export) and sales of products derived from forests and trees.

There are, however, many problems in identifying and developing these potentials. Apart from a few products and trade/sales items that fall within the "regular" market economy statistics and taxable trade, e.g. timber grown in government or private plantations, or derived from official concessions in State Forests, and sawn in registered sawmills, furniture produced in likewise registered industries and sold through regular trading mechanisms, officially imported and exported wood-based products (including paper products), etc., most forest/tree derived products fall outside official statistics and government control. Much trade is actually illegal, derived from trees and forests which are, in principle, not permitted to harvest or where very unclear tenure rights exist; other products are illegally traded across boundaries. Hardly any wood and NWFP products grown on farm or locally collected by people outside farms, and sold on local markets, are ever entering official statistics. Charcoal and fuelwood are, obviously, key examples, but this also applies to a vast array of other products.

Another fundamental problem in fully realising the potential of wood and non-wood derived products from forests and trees is the fact that we are not really talking about a *sector* in the normal sense. Even where official statistics and information exist on production and trade in some commodities, it is split between the agricultural, transport, energy, tourist, industry and other sectors. As a consequence, there are no educational and research institutions, or Ministries and civil service institutions that have an overall responsibility for forest and tree products. In the past, there were often "Wood Utilisation Institutes" which did some interesting work on the technical and commercial properties and potentials of various timber species, but these are rarely in operation any longer. There are quite a number of Networks and NGOs working with research institutions and/or local communities in developing markets for specified products, particularly those working with NWFPs (like NGARA for gums and resins, SAFIRE for tree-derived natural products, and PhytoTrade Africa for NWFPs).

A consolidated effort ought to be made to identify, develop and support the income generating potential of various products derived from forests and trees in eastern and southern Africa. This ought to start with a systematic collation and evaluation of all relevant experience and examples of commercialisation of such products, and attempting to quantify the current and potential value of such products. Regional workshops ought to be organised with all relevant networks, NGOs, university and research institutions, private sector representatives, government bodies, and regional/international organisations and programmes of relevance, to discuss ways of setting up mechanisms (networks, secretariats, institutes?) to support communities, entrepreneurs, farmer associations, traders, and others with market analyses and intelligence, value chain analyses, extension services, etc.

Many Swedish and other external institutions and organisations have considerable expertise and experience in supporting entrepreneurs and small-scale commercial initiatives in the forest sector. Such experience includes institutional, technical and economic aspects of business development and management. Partnerships between African and Swedish actors might yield very interesting outcomes – from sharing information and experience to establishing joint enterprises.

In order to systematically inventory and assess the potential for income generation and poverty alleviation of forest and tree products and services it is proposed that a project is carried out in two phases over a three-four year period. The first phase would comprise in-depth analyses of existing information and experience of the commercial value and market potential of such products and services. A workshop to discuss these analyses and conclusions from them will be held during the first phase aiming at identifying a limited number of promising products and services with a potential of enhanced income generation for communities, farmers and entrepreneurs. The workshop would also be charged with the task of suggesting and designing activities to support the realisation of such potential. The second phase will focus on implementing a select number of such pilot activities. The project is proposed to be coordinated and administrated by AFF, with relevant local, Swedish and other partners involved as indicated in the summary "Work Plan and Activities" table below. There will be synergies, particularly in the initial analytical phase, between this project and other proposed projects, e.g. 3:1 on "*Empowering producer stakeholders"* and 3:4 on "*Improving access to finance for small-scale tree growers and forest enterprises"* (see these).

Overall aim

To identify the income generating potential of various forest and tree-derived products and services in eastern and southern Africa, and assist in developing mechanisms for enhancing this potential.

Specific objectives for and activities in phase I

The first phase would comprise analytical studies on a number of the most interesting forest/treederived products and services with a current and/or assumed future potential for income generation. Several such products, e.g. charcoal, honey, gums and resins, some tree-derived medicines and food stuff, etc., have been the focus for many rather recent studies at national or local levels. For these, it would be a matter of synthesising such studies into more regionally applicable overviews of potentials and constraints. For others still, e.g. locally made furniture, building material, wood based tools and utensils, etc., the current and potential market situations in the region are less known and studied. Likewise, the potential for "forest services" to generate incomes for farmers and communities attract a lot of attention these days but is little analysed and quantified. Experts and institutions would be commissioned to carry out such compilations and studies. These would be presented at two regional workshops, one in E and one in S Africa, respectively. At these workshops, a limited number of key products and services with a clearly argued potential will be identified, and activities to enhance and realise their income generating potentials will be suggested which will form the basis for the second phase. Specific objectives will include:

- Systematically collate and analyse relevant studies, experiences and examples of commercialisation of forest and tree derived products in E and S Africa; try to quantify economic value and income potential.
- Analyse the potential role of payment for forest services in income generation and poverty alleviation, e.g. CDM, carbon trade, evolving REDD+ mechanisms, hydrological services, biodiversity conservation, ecotourism, etc.,
- Organise two regional workshops (one each for eastern and southern Africa) to present the study findings and recommendations and to agree on how to develop the potentials and overcome constraints for 10-15 key products and services; identify roles for Swedish and other external institutions, relevant networks, NGOs, university and research institutions, government bodies, and regional and international organisations and programmes.
- > Produce reports, fact sheets and policy briefs on the findings.

Specific objectives for and activities in phase II

The second, two years, phase of the project will focus on implementing some of the priority actions identified through the studies and workshops in phase 1. Such actions will in all likelihood involve, but not be restricted to:

- Identify/strengthen/build the capacity of national and regional institutions and networks for supporting entrepreneurs, farmer associations, traders, and others with market analyses and intelligence, value chain analyses, extension services, etc.
- Produce a series of technical notes, policy briefs/guidelines and training packages on various key products and services for use in capacity building in the region.
- Conduct policy and legislative reviews to facilitate legalising/formalising production and trade of selected products currently in the informal market. (Emphasis will be on identifying policy and legislative impediments to commercialisation).
- Facilitate partnerships between key national/regional institutions/networks and Swedish and other external institutions to promote mentoring, coaching and business development support.
- Strengthen marketing institutions and organisations, market information access and streamlining the value chains of key products; also promotion of research by national and international research institutes and universities on relevant topics.

Work-plan and activities

Below follows, in tabular form, a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities.

Activity description	Responsible people and partners; roles	Time plan
Phase I	AFF overall responsible, consultants and partners as indicated	2012
1. Collate and analyse relevant studies, experiences and examples of commer- cialsation (incl. economic value and income potential) of forest/tree derived products in E/S Africa.	Individual consultants and experts from key institutions, e.g. FAO, WWF, ICRAF, NGARA; Each of a group of three consultants responsible for sets of products, e.g. wood based utility products, fuel/energy, NWFPs. and environmental services.	First 10 months of 2012
2. Analyse potential roles of payment for forest services in income generation and poverty alleviation, e.g. various CDMs, carbon trade, hydrological services, ecotourism, etc.	Individual consultants and experts from key institutions, e.g. FAO, WWF, IUCN, ICRAF. CIFOR; two consultants, responsible for climate (REDD+, water) and biodiversity (ecotourism) based services, respectively	First 10 months of 2012
3. Organise two regional workshops (one each for E and S Africa) to present the study findings and recommenda- tions and to agree on project to develop the potentials and overcome constraints for 10-15 key products and services.	AFF organises workshops; consultants present reports; participation by relevant national, regional and international groups and institutions, NGOs, private sector (see below);	November/December 2012
4. Produce reports, fact sheets and policy briefs on the findings.	Experts and consultants involved with studies, assisted by AFF (and KSLA?) Secretariat	Second half of 2012
Phase II	AFF overall responsible, with partners as indicated	Jan 2013 – Dec 2014
5. Strengthen the capacity of producer associations, institutions and networks to support entrepreneurs, farmers and communities, traders, and others with market analyses and intelligence, value chain analyses, financial services, extension services, etc.	Lead national and regional institution(s) and resource persons, with inputs from relevant Swedish and other external partners.	2013
6. Expand the series of technical and policy briefs and guidelines on the key products and services developed in Phase I into training packages for use in training, extension and education, as well as in promoting public and private support.	Individual experts/consultants and relevant institutions and networks; coordinated and edited by AFF	2013

7. Conduct policy/legislative reviews to facilitate legalising/formalising produc- tion and trade of selected products currently in the informal market, parti- cular emphasis on identifying policy and legal impediments to commercialisation	Consultants and possibly university and/or independent economic research institutions	2013
8. Facilitate partnerships between rele vant national/regional institutions and networks and Swedish and other exter- nal institutions to promote mentoring, coaching, technology transfer, product quality assurance, and business development support.	Several of the possible partners mentioned below. Coordinated by AFF.	2013-2014
9. Strengthen marketing institutions and organisations, market information access and support streamlining of the value chains of key products,	Alliance of lead institutions coordinated by AFF.	2013-2014

Possible partners to consult, invite to workshops, and work with in implementation of project.

- Key regional networks and NGOs working with development and promotion of forest/treederived products (e.g. NGARA, SAFORGEN, SAFIRE, PhytoTrade Africa, OPAZ, CP Wild, Honey Care, Tanzania, and some others) should definitely be involved;
- The new Forest Agencies with a responsibility to assist communities and farmers to generate income from trees and woodland ought to play an important role, and this also applies to the various Forest Working Groups in countries with an nfp-process in place;
- Existing associations and private sector players involved with primary and secondary production and trade/sales of forest products are obvious stakeholders, e.g. tree grower and community forestry associations, sawmillers, furniture makers, wood carvers, charcoal burners and traders, and many others must be consulted and in some cases involved;
- Some forestry research, training and educational institutions, particularly those with natural resources products economics in their mandates (e.g. CSIR, NISIR);
- Regional and international organisations operating relevant activities in the region, e.g. IUCN, WWF, FAO, ICRAF, IIED, also the formal political and economic regional bodies, where these have forest products trade on their agenda, e.g. EAC, COMESA, and SADC;
- Possible relevant Swedish partners would include the Federation of Swedish Forest Owners, the Swedish Forest Agency, some departments of the Forest Faculty of SLU and the University of Gothenburg, and networks operating from these (Agri4D, EfD); the Swedish Forest Industries Federation might have a role, as well as some individual companies (e.g. STORA and IKEA); also the SSC-Forestry company has considerable experience from Africa in certification of forest operations and products, including "fair trade".

Project proposal 3:3

Strengthening Professional Forest Associations and Societies

(Finalised 2011-04-10)

Background and justification

Since UNCED, the importance of forests due to their multiple functions and roles, especially their provision of critical environmental services and products that contribute to household and national economies, has raised the need for their sustainable management. This has resulted in many initiatives to enhance the sustainable management of forests to increase their benefits at local, national and global levels. However, the realisation of the full potential of forests in east and southern Africa is often limited by a number of factors that include the lack and limited application of forest science and basic forest management standards and guidelines.

In all the countries in the region **professional forest associations** were established to provide a platform for professional foresters to share scientific knowledge and experiences from practical management of the forest resources in order to improve the management and utilisation of tree and forest resources. This resulted in many forest management challenges and gaps in knowledge being identified and research issues prioritised to address these issues. The growing need to manage forests to meet their multiple functions and roles has brought with it more challenges and therefore the need for well qualified and experienced forestry professionals who can provide sound advice to forest owners and managers on the most appropriate management strategies for the different forests.

As a component under the project "Strengthening Africa in international and regional dialogues on forestry and related areas", one of seven projects funded by Sida in the period 2008-2011, AFF has conducted a study on the state of national forestry associations and societies. The study also looks at ways to strengthen them, as well as looking into the possibilities of establishing them in countries where they do not yet exist, and, finally, assesses how they can be linked to, and supported by, the Forum. The sub-studies for eastern Africa ((Ethiopia, Sudan, Uganda, Kenya, Eritrea, Tanzania, Rwanda and Burundi) and southern Africa (Botswana, Lesotho, Mauritius, Mozambique, Namibia, South Africa, Zambia, Zimbabwe, Madagascar and Malawi) were completed by the end of 2010, whereas the one for West Africa is not yet (March 2011) ready.

What is obvious from these studies is, unfortunately, that nearly all the professional forest associations (PFAs) in the regions are weak or not functional. Major challenges facing them include lack of financial resources, weak organisational capacity, the low importance accorded to forestry in many countries and the limited demand or requirement for application of professional standards in the management of forests in the region.

Project proposal

Based on the outcomes of the above mentioned studies, it is suggested that a project of three years duration (2012-2014) is initiated to implement some of the recommendations in them aiming at strengthening the professional forestry associations and societies in Africa. The studies and analyses of strengths and weaknesses of these have already been done, their potential roles have been identified, and strategies have been suggested on how these roles can be realised. It would therefore be logical to start this project with a workshop where identified recommendations are prioritised and a more detailed workplan is agreed on outlining how, when and by whom the implementation of the recommendations shall be done. Even if such a plan must be designed and agreed on before a final set of activities and a budget can be drawn up in detail, enough of these actions are obvious to enable a tentative plan and budget as shown below.

Overall aim

To revive and build the capacity of professional forest associations and societies in Africa.

Specific objectives and activities

- Organise two regional stakeholder workshops (one for E/S and one for W/C Africa) to present findings from the PFA studies and agree on strategies, priorities and plans for strengthening PFAs, including how they can collaborate with AFF and evaluating the feasibility and desirability of hosting an African PFA apex body/secretariat at AFF.
- Build the organisational and management capacity of PFAs, including strategies for resource mobilisation, long term sustainability and how to promote professionalism and ethics among members.
- Organise training events, joint conferences and seminars on critical emerging forestry issues and specific thematic areas, e.g.:
 - Payment for environmental services
 - Carbon trade and related issues, including REDD+
 - Certification of forest operations and products
 - Forest Law Enforcement, Governance and Trade (FLEGT)
 - Sustainable forest management guidelines for different forest types under different management objectives
- Organise and facilitate exchange visits, twinning arrangements, sharing of information and experience, and other joint activities within Africa and between African, Swedish and other PFAs; include coaching and mentoring.
- > Assist in formalising existing and establishing new PFAs as legal boards that can monitor and supervise ethics and conduct among members and issue recognised professional certificates.
- Start planning for a major event of all African PFAs at the forthcoming World Forestry Congress in South Africa in 2015.

Work-plan and activities

Below follows, in tabular form, a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities.

Activity description	Responsible people and partners; roles	Time plan
	AFF overall responsible, consultants and partners as indicated	2012-2014
Organise two regional stakeholder workshops (one each for E/S and W/C Africa) to present findings from the PFA studies and agree on strategies, priori- ties and plans for strengthening PFAs, including how they can collaborate with AFF and evaluating the feasibility and desirability of hosting an African PFA apex body/secretariat at AFF.	AFF Programme Officer as coordinator; Two workshop facilitators (also responsible for Proceedings); Consultants (same as the ones doing the studies) to prepare and give presentations; Existing PFAs in the two regions plus other relevant African stakeholders invited to meeting; Swedish and international partners.	First half of 2012
Build the organisational and manage- ment capacity of PFAs, including strate- gies for resource mobilisation, long term sustainability and how to promote professionalism and ethics among members.	AFF Programme Officer as coordinator; Consultants, working groups and resource persons as appropriate.	2012-2014
Organise training events, joint seminars and conferences on critical emerging forestry issues and specific thematic areas.	AFF Programme Officer as coordinator; Training and training material provided by relevant institutions and experts.	2013-2014

Organise and facilitate exchange visits, twinning arrangements, sharing of information and experience, and other joint activities within Africa and between African, Swedish and other PFAs; include coaching and mentoring.	AFF Programme Officer as coordinator; Relevant institutions, resource persons and facilitators in Africa, Sweden and elsewhere.	2013-2014
Assist in formalising existing and establishing new PFAs as legal boards that can monitor and supervise ethics and conduct among members and issue recognised professional certificates.	AFF with appropriate legal and institutional expertise.	2013-2014
Start planning for a major event of all African PFAs at the forthcoming World Forestry Congress in South Africa in 2015.	AFF with an appointed Task Force with membership drawn from PFAs.	2014

Possible partners to consult, invite to workshops, and work with in implementation of the project.

- The most obvious partners are the various existing Professional Forest Associations and Societies in the regions;
- National Forest Agencies, Forest Working Groups, relevant and related NGOs and other professional bodies and associations (e.g. from agriculture, forest industry, environment, etc.);
- Regional partners may include ANAFE, FAO's Regional Office for Africa, the AU Commission;
- Among Swedish and international partners are the Swedish Forestry Society, the Swedish Professional Foresters' Association, IUFRO, International Society of Tropical Foresters (ISTF), Commonwealth Forestry Association (CFA), and ILO.

Project proposal 3:4

Improving access to finance for small-scale tree growers and forest enterprises

(Finalised 2011-04-10)

Background and justification

In the majority of African countries most forestry activities are undertaken in the informal sector where forests and trees play a major role in providing livelihoods for rural communities and the urban poor. The informal sector is characterised by numerous small-scale forest-based enterprises that are undertaken at individual or household levels. The major sources of financing for forestry activities in the informal sector are in the form of own savings, reinvestment of profits, and own labour. This has limited the growth and performance of the small-scale forest-based enterprises and reduced their ability to reach their full potential and increase the levels of benefits to those involved in the enterprises. Given that most forestry activities are likely to continue to be in the informal sector in the foreseeable future, implementation of sustainable forest management in eastern and southern Africa will largely depend on the capacity of local communities, rural producers and small-scale forest based enterprises to mobilise resources and invest in forestry activities. Some efforts are made today to establish financing mechanisms for rural enterprise, often based on temporary donor funding and lending features from the successful Grameen Bank in Bangladesh. One such example is the African Rural and Agricultural Credit Association (AFRACA, www.afraca.org), based in Nairobi.

A major problem is that in eastern and southern Africa most rural people have limited access to financial services provided by formal financing institutions. For example, in Tanzania less than 6% or the total population have access to Banks (*Basu et al.*, 2004). However, recent developments in Microfinance offer new opportunities for improving access to finance for poor rural communities. Many microfinance institutions have emerged in the region and these include village and mobile banks (in Tanzania), savings and credit cooperatives, micro-financing portfolios in postal and commercial banks, and national micro-financing institutions and banks, e.g. the Cooperative and Rural Development Bank (CRDB) Ltd, and Akiba Commercial Bank (ACB). In addition, partnerships between the formal financial system and micro-financing institutions have helped to improve access to financial resources for small-scale entrepreneurs. In plantation forestry, the use of outgrower schemes, in which forest companies partner with small-scale farmers and provide them with financial support (e.g. Sappi and Mondi in South Africa), has helped to avail resources for tree growing to small scale-farmers (*Gondo*, 2009).

The major challenges that need to be addressed in order to improve access of finance for small scale tree growers and rural producers include:

- lack of collateral to access credit from conventional banks and other financing institutions,
- there is sometimes a rather long period between the need for capital and the ability to repay when tree growing is involved,
- lack of financial products suitable for small-scale forest producers and small scale forest based enterprises in most countries,
- poor levels of organisation,
- limited business knowledge and management skills, and,
- lack of information on available financing options.

It is therefore imperative that any efforts to mobilise financial resources for sustainable forest management in the region include financing mechanisms that target the financial needs of local communities, small-scale forest-based enterprises and rural producers.

Swedish small-scale tree growers and enterprises have been successful at organising themselves and improving their access to finance. Whilst the macro-economic and other conditions are differrent from the prevailing situation in eastern and southern Africa, it is envisaged that there are opportunities for organised tree and forest producers in the region to learn from the experiences of their Swedish counterparts.

Project proposal

It is suggested that a project is carried out to make an in-depth assessment of the situation with regard to financing services available to the small-scale forest and forest industry sectors in eastern and southern Africa, and developing strategies for and facilitating an improvement of the situation. Such a project can be carried out during up to two years.

Overall aim

To undertake an in-depth assessment of the financial needs, constraints and opportunities for accessing finance for small scale tree growers and forest based enterprises and design strategies for improving their capacity to access finance.

Specific objectives and activities

- Conduct an in-depth review of the current situation regarding access to financial services for small-scale tree growers and forest enterprises.
- Analyse existing financing mechanisms and opportunities for developing alternative strategies for improving mobilisation of financial resources and access to finance for small-scale tree growers and forest enterprises.
- Organise two sub-regional workshops one for eastern, one for southern Africa to present and discuss review and analysis, and to design plans and strategies to improve access to financing.
- > Identify opportunities for collaboration and joint ventures between tree growers and forest enterprises in E and S Africa with relevant Swedish and other institutions.
- > Facilitate information sharing on available financing options and strengthen information and communication between the forestry sector and financial institutions.

Work-plan and activities

Below follows, in tabular form, a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities.

Activity description	Responsible people and partners; roles	Time plan
	African Forest Forum overall responsible, consultants and partners as indicated	2012/13
Conduct an in-depth review of the current situation regarding access to financial services for small-scale tree growers and forest enterprises.	AFF Coordinator Two consultants, one forest enterprise expert and	January- September
Analyse existing financing mechanisms and opportunities for developing alterna- tive strategies for improving mobilisation of financial resources and access to finance for small-scale tree growers and forest enterprises.	one financing expert	2012
Organise two sub-regional workshops to present and discuss review and analysis, and to design plans and strategies to improve access to financing.	AFF Coordinator Two workshop facilitators Consultants to make presentations Forest enterprise networks/associations Financing institutions.	November or December 2012
Identify opportunities for collaboration and joint ventures between tree growers and forest enterprises in E and S Africa with relevant Swedish and other institutions.	AFF Coordinator Forest enterprise networks/associations Relevant institutions in Sweden and elsewhere	2013

Facilitate information sharing on avail- able financing options and strengthen information and communication between the forestry sector and financial institutions.	AFF Coordinator Forest enterprise networks/associations Financing institutions.	2013
--	---	------

Possible partners to consult, invite to workshops, and work with in implementting the project:

- In E and S Africa, the project will link up with the National Forest Agencies/Administrations, financial institutions that have community banking and micro-finance services (e.g. AFRACA), NGOs and others who provide business development services to small-scale enterprises; relevant research institutions;
- A whole range of international and regional institutions are in one way or the other involved with forest business development and financing, e.g. FAO, IIED, African Development Bank, World Bank, East Africa Development Bank, NFP facility, Eastern Arc Mountain Conservation Endowment Fund (EAMCEF), WWF, CARE International, ITTO, Global Forest Network, Congo Basin Forest Fund.
- Among Swedish and other potential partners are: Financing institutions supporting tree growing and forest based enterprises, the "Hand-in-Hand" NGO, Family Forest Owners' Association, the Nordic Development Bank.

Project proposal 3:5

Strengthening the capacity of regional stakeholder institutions through linking forest working groups

(Finalised 2011-04-10)

Background and justification

Each of the three main sub-regional economic communities (EAC, COMESA, SADC) in the region has articulated a forestry agenda that requires active stakeholder participation for its effective development, implementation, monitoring and review. At international level, especially under the UNFF forest policy processes and dialogue, there is strong interest to promote sub-regional activities and cooperation. Unfortunately, multi-stakeholder platforms that can facilitate the participation of all key stakeholders are still weak and poorly developed. For example, in southern Africa the forest stakeholders' forum is still in its infancy and is run by the SADC secretariat. There is also the regional Community Based Natural Resources Management (CBNRM) Forum that is currently operating with project funding mobilised by WWF. In the other sub-regions, stakeholder interaction is mainly intergovernmental. However, in the east Africa region there is potential to establish strong and effective regional stakeholder institutions for representing forestry stakeholders in regional policy development processes. For example, the National Forest Working Groups (NFWG) in East Africa could be linked to form a regional working group.

The NFWGs are networks of civil society organisations, government departments, academic and research institutions which are engaged in the development and sustainability of the forest sector. They provide a platform where the various forestry stakeholders deliberate on and influence developments in the sector as well as independently monitor the implementation of the national forest policy, legislation and programmes. The NFWG are common in east Africa where the groups from Kenya, Tanzania and Uganda have made attempts to exchange notes and share experiences. In southern Africa, the national community based natural resources (CBNRM) forums have a similar mandate although they cover a broader range of resources. The southern Africa CBNRM regional forum provides a platform for stakeholders from the region to exchange experiences and share information. These platforms provide an opportunity for facilitating formal multi-stakeholder interaction with regional policy processes and programmes.

The growth in interest in, and proliferation of, trans-boundary forestry initiatives and other natural resources management programmes such as forest fire management, wildlife corridors, the Greater Limpopo and KAZA initiatives, etc., call for strong and effective regional multi-stakeholder networks and institutions to facilitate effective participation. What is required is to improve the organisational and self-management capacity of these institutions to effectively represent the interests of their members at regional and international levels and to formalise these structures at the sub-regional levels.

Many Swedish institutions and organisations have considerable expertise and experience in supporting stakeholder representation at national and international level.

Project proposal

It is suggested to develop a project on how the organisational, technical and business capacity can be built and/or strengthened of regional multi-stakeholder institutions and networks in eastern and southern Africa to act as authoritative and efficient players in regional and international forestrelated processes. The possible role of Swedish and other actors in contributing to such strengthened capacities will also be explored. The project is proposed to last for three years (2012-2014), with an initial year of analyses and discussions, and two years of implementing some identified capacity building activities.

Overall aim

To develop and strengthen the capacity of regional forest stakeholder institutions and networks to effectively participate in policy development processes at regional and international levels.

Specific objectives and activities

- Analyse the status and requirements for formalising the forestry multi-stakeholder platforms in the eastern and southern Africa sub-regions.
- Conduct mini workshops for each region to develop terms of reference and capacity building programmes for regional institutions and networks.
- Facilitate establishment and formalisation of sub-regional forestry multi-stakeholder platforms.
- Strengthen and build the capacity of institutions to self-manage and coordinate their activities to ensure effective participation and representation of all key stakeholders; through training, resource mobilisation and constituency consultation processes.
- Facilitate collaboration with relevant Swedish and other institutions, including exchange visits, sharing of information and experience, and coaching and mentoring.

Work-plan and activities

Below follows, in tabular form, a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities.

Activity description	Responsible people and partners; roles	Time plan
	African Forest Forum overall responsible, consultants and partners as indicated	2012-2014
1. Analyse the status and requirements for formalising the forestry multi-stake- holder platforms in the eastern and southern Africa sub-regions.	Two consultants, one for E one for S Africa	January-June 2012
2. Conduct mini workshops for each sub- region to develop terms of reference and capacity building programmes for regional institutions and networks.	AFF organises mini-workshops; Two consultants present reports; Participation by relevant national and regional forest stakeholder groups and institutions, NGOs, private sector Also regional bodies (RECs): EAC, SADC, COMESA Possible Swedish and other partners (see below)	September- October 2012
3. Facilitate establishment and formali- sation of sub-regional forestry multi- stakeholder platforms.	AFF and lead institution; RECs (EAC, COMESA, SADC) Relevant Swedish and other institutions	2013
4. Strengthen and build the capacity of institutions to self-manage and coordinate their activities to ensure effective participation and representation of all key stakeholders.	AFF and lead institution; RECs (EAC, COMESA, SADC); Consultants, training facilitators Relevant Swedish and other institutions	2013-2014
5. Facilitate collaboration with relevant Swedish and other institutions, including exchange visits, sharing of information and experience, and coaching and mentoring.	AFF and lead institution; Relevant regional institutions and networks; Swedish and other actors.	2013-2014

Possible partners to consult, invite to workshops, and work with in implementation of the project:

- The main target groups are National Forest Working Groups (NFWGs), mainly in east Africa, National Community Based Natural Resources (CBNRM) forums, in southern Africa and their regional apex bodies; various professional foresters' associations, relevant NGOs;
- Regional Economic Communities (RECs): EAC, SADC and COMESA;

Several international institutions with relevant regional and/or national programmes concerning forest stakeholder groups, e.g. ANAFE, IUCN, WWF, CIFOR, ICRAF, IIED, FAO, the NFP Facility, UNFF, CARE International;

≻

 Swedish and other partners, such as the Federation of Swedish Forest Owners, the Swedish Forest Agency and the Swedish Forest Industry Association.

Project proposal 3:6

Improving medium/large forest industries in the region

(Finalised 2011-04-10)

Background and justification

Africa has about 15 million ha of planted forests which is equivalent to 5% of the global total (*FAO*, 2006). About 3 million ha of these are for protection purposes while the rest are for production of wood and non-wood forest products. The majority of the plantations are in South Africa, Sudan, Algeria, Morocco, and Tunisia. The average annual planting rate between 1990 and 2005 was estimated at 70 000 ha. The dominant species in eastern and southern Africa are *Eucalyptus* and *Pinus spp.*. *Eucalyptus* is the most widely planted genus covering 22.4% of all planted area, followed by *Pinus* (20.5%), *Hevea* (7.1%), *Acacia* (4.3%) and *Tectona* (2.6%). The area covered by other broadleaved and other conifers is respectively 11.2% and 7.2%, while unspecified species cover 24.7% (*Chamshama and Nwonwu*, 2004). Overall, the majority of planted trees are exotic species chosen for their capability to grow rapidly to produce wood of desired quality. With the exception of South Africa, Swaziland and Zimbabwe, most of the plantations in Africa are established and managed by public forest administrations (PFAs).

The area and quality of indigenous forests continue to decline due to conversion to agricultural land and unsustainable forestry practices, infrastructure and residential development, and other factors. Additionally, indigenous forests are increasingly being designated for protection of soils and water, conservation of biological diversity or other forms of reserves that preclude or limit production of wood, fibre, fuel and non-wood forest products at a time when demand for these resources increases substantially (*FAO*, 2011). In view of the decline in commercial timber harvesting from indigenous forests in many countries, especially in eastern and southern Africa, planted forests have emerged as an important alternative source of wood and wood products. At a global level, planted forests accounted for 7% of the total forest area in 2010 but had the potential to produce two thirds of the global roundwood demand (*FAO*, 2010). Unfortunately, many planted forests in Africa are poorly managed and in some countries there has been a decline in both planted areas and output.

However, in the last five years there has been a marked increase in the establishment of planted forests in Africa driven largely by the growing domestic and global demand for wood and non-wood forest products which cannot be met from exploitation of natural forests. In any case, with the exception of a few countries in Central Africa, most African countries have very little commercially valuable natural forests. This has attracted renewed interest from both domestic and foreign investors into the sector. Examples include the growing investments in eastern and southern Africa by Green Resources (Mozambique, Tanzania, South Sudan and Uganda (see Box).

Box: Green Resources Industrial Plantation development in Africa

Green Resources AS is a plantation, carbon off-set, forest industries and products, and renewable energy company that has invested many million USD in Africa, mainly in Mozambique, Sudan, Tanzania and Uganda. The company now has 14 000 ha of plantations and has a planting target of more than 200 000 ha. In 2009, the company signed a framework agreement with the government of Mozambique to establish 125 000 ha of energy/pulp plantations and received title for 179 000 ha of land in South Sudan. In Uganda, the company has established a pole treatment plant to supply trans-mission poles to the Lake Victoria region. Green Resources has integrated carbon sequestration into some of its plantation and natural forests management programmes. The company has carbon offset projects in Mozambique, Tanzania, Sudan and Uganda, and it has the potential to generate 20 million tonnes of carbon offsets by the year 2020. Green Resources' Mapanda/Uchindile forest project was certified under the Voluntary Carbon Standard (VCS) in July 2009.

Source: Green Resources, 2009.

Most of these developments are taking place in eastern and southern Africa. The growing demand has also seen a rapid expansion of commercial tree planting on farms, especially in east Africa where trees from small-holder farmers now supply a significant proportion of the industrial roundwood.

In terms of production, Africa accounted for 19% (658 million m3) of the global roundwood in 2006, although 90% of this was fuelwood. South Africa alone accounts for 20% of the industrial roundwood production in Africa, while Nigeria contributed 13%. Furthermore, Africa's share of processed wood and wood products is very low (*Table 1*).

|--|

Product	Global	Africa	Africa's share (%)
Industrial roundwood (million m3)	1635	69	4
Sawn wood (million m3)	424	8.3	2
Wood-based panels (million m3)	262	2.5	1
Pulp for paper (million tonnes)	195	3.9	2
Paper and paper board (million tonnes)	364	2.9	1
Woodfuel (million m3)	1872	589	31

In general, value addition in wood processing and pulp and paper has actually stagnated. Africa's share of global trade in forest products is also extremely low. Trade in wood products increased from \$1.6 billion in 1980 to \$4 billion in 2006, in comparison with global trade that exceeded \$200 billion in 2006. Thus, trade in wood products in Africa represents about 2% of total global trade.

Even though some countries that produce industrial roundwood from natural forests have imposed bans on the export of logs in order to encourage domestic processing, the growth and development of wood processing and other value adding industries in the countries has remained low. Instead, in the majority of countries, the forest industry sector is dominated by small-scale enterprises in the informal sector. Some of the reasons affecting the establishment and performance of medium to large scale forest industries include:

- Lack of, and poor, access to capital
- High production costs due to use of inefficient technologies
- Low recovery and high waste due to inefficient technology
- Fragmentation of the forest industry sector
- Small domestic markets
- Poor infrastructure
- High dominance of the informal sector
- Poor access to markets and market information
- Lack of organisation of the medium to large scale companies

Given the growing demand for forest products on both the domestic and export markets, Africa has the potential to significantly increase production of both roundwood and processed forest products if the above challenges are addressed. For example, the FAO forest outlook study projects that Africa's production of sawn wood is likely to increase from 9 million m3 in 2005 to 14 million m3 in 2020 (*FAO*, 2009). To realise the continent's full industrial forestry potential will require major improvements, especially in the performance of medium to large scale forest industries, the enabling environment (policy and institutional frameworks) and improved production of wood supply. In this regard, there is need to undertake an in-depth study on the status of forest industries in Africa and to identify the specific constraints and opportunities in the different regions. This information is necessary for devising effective strategies for overcoming the constraints and taking advantage of the opportunities.

Swedish forest companies have, over the years, developed to become some of the most efficient and competitive in the world. This applies to organisational strengths, technical know-how, strong market positions, involvement in secondary value adding industry, and ability to influence policy. Some of this experience could, with relevant adaptation, be applicable also in Africa. There is therefore the possibility of sharing experiences and establishing joint ventures between Swedish and African forest companies to improve the development and competitiveness and performance of forest companies in Africa.

REFERENCES:

Chamshama, S.A.O. and *F. Nwonwu,* 2004. Forest plantations in Sub-saharan Africa. A report prepared for the project "Lessons learnt on Sustainable Forest Management in Africa". AFORNET, KSLA and FAO; 54pp

FAO, 2009. State of the World's Forests 2009. Rome. *FAO*, 2010. Planted Forests in Sustainable Forest Management: *A statement of principles*. Rome.

Project proposal

It is proposed that a major, in-depth study and an analysis are carried out on the current situation with regard to primary and secondary forest industries in E and S Africa, and of the potential for forest industry establishment and expansion in the region. Apart from describing the current situation, such an analysis would look at the potential market/demand situation (both domestic within the region and for export), the current and predicted possible raw material supply, land availability, social and environmental factors to be considered, availability of capital and know-how, infrastructural improvement needs, desirability of certification of forest management and products, and at potentials for partnerships - both between the private and public sectors and local communities and farmer groups on the one hand, and between these and international investors in the forest sector on the other. The study and analysis would then be presented and discussed at a meeting with representation from the private and public sectors, local community and forest group apex bodies, and from international forest enterprise, with the aim to identify ways forward to realise the potentials and overcome the constraints associated with forest industry development. No assumptions are made here about how possible recommendations concerning potentials and constraints coming out of the workshop will be addressed and by whom. Thus, the proposal is restricted to the study/analysis and the workshop to discuss these. Furthermore, this study and analysis will not include wood production for energy purposes (including fuelwood and charcoal); this will be dealt with in a separate study.

Relevant information on, for example, the raw material situation from plantations will be possible to derive from a parallel AFF study on "Rehabilitation of public forest plantations" by a group of experts under the leadership of Prof. S. Chamshama of Sokoine University, Tanzania.

Overall aim

To identify the potential of forest industries to contribute to economic and social development in E and S Africa, and how this potential can be realised and constraints overcome in economically, socially, environmentally and technically acceptable ways.

Specific objectives and activities

- An *in-depth study of forest industries* in E and S Africa will be carried out with the following sub-goals:
 - Describe/inventory the current situation with regard to primary (e.g. saw mills) and secondary (e.g. furniture makers) forest industry in the region; types, size, geographical distribution, ownership pattern, employment pattern, history leading up to current situation, etc.;
 - Describe current market/demand situation for forest products; type of products, import/ export and regional trade, value chains and profitability in the sector, etc.;
 - Describe raw material supply situation; what kinds and quality of wood, how much from plantations, natural growth, farms, importation; forest management situation (exploitation, sustainability, technology level, etc.);
 - Describe policy and legislation situation regarding the forest production/industry sector; also existing institutions, private sector organisations, NGOs, etc. involved with the forest products and industry sectors.
- An analysis of the future potential of forest industries in E and S Africa with the following sub-goals:
 - Assess the development in the next 15-20 years of the market/demand situation (both domestic within the region and for export) with regard to different forest products; importance of urbanisation, expanding economies, increasing living standards, and nearness to international markets and trade routes;
- Assess what kind and quantities of wood raw material will be needed in the same period and from where it might come – increased public and/or private commercial plantations, community forests, farmer outgrower schemes, importation?
- Assess land availability for wood raw material production geographical, tenure and current land use, social and environmental factors to be considered;
- Assess constraints caused by lack of available capital and know-how, of impeding policies and legislation, and of deficient infrastructure, and how these can be overcome;
- Assess importance and desirability of certification of forest management, products and trade to future investments in forest industry;
- Assess the roles of partnerships in realising the potential for forest production and industry expansion - between the private and public sectors, between these and local communities and farmer groups, and between national and international investors and stakeholders in the forest sector.
- A workshop will be organised where the study and the analysis above will be presented and discussed, with the following aims:
 - $\circ~$ Add value to the study and analysis, by critically looking at the findings, conclusions and recommendations;
 - Identify ways forward to realise the potentials and overcome the constraints associated with forest industry development in the region; and,
 - Suggest plans, strategies, priorities and actions, etc., aimed at achieving this.

Work-plan and activities

Below follows, in tabular form, a summary of suggested activities, people and partners responsible and involved, and a suggested time for implementation of the activities.

Activity description	Responsible people and partners; roles	Time plan
	African Forest Forum overall responsible, consultants and partners as indicated	2013
 An in-depth study of forest industries in E and S Africa. An analysis of the future potential of forest industries in E and S Africa. 	AFF Senior Officer as Coordinator A team of consultants made up of one international and three regional experts Several private and public forestry sector partners from the countries, the region and internationally to	January- September 2013
3. A workshop to present and discuss	provide inputs AFF Senior Officer as Coordinator and Facilitator at	October or
the study and analysis.	Workshop Consultants to present study and analysis Participants from the region and outside.	November 2013

Possible partners to consult, invite to workshops, and work with in implementting the project:

- Representatives from the private forest production and industry sector in E and S Africa, including forest industries' and saw-millers' associations, Timber councils, Forest Working Groups, National Forest Agencies/Administrations, relevant research and educational institutions, NGOs and others who provide business development services to small- and mediumscale enterprises;
- A whole range of international and regional institutions are already, or may potentially be, with forest industry development and financing, e.g. EAC, SADC, COMESA, FAO, African Development Bank, World Bank, East Africa Development Bank, NFP facility, International Tropical Timber Organisation (ITTO), CIFOR, UNIDO (through its "Africa's Agribusiness and Agro-Industry Development Initiative"), ILO;
- Among Swedish and other potential partners are various Forest Industry Associations, Forest Owner's Association, SSC-Forestry Ltd.

Appendix 4.

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.

Agbogidi and **Ofuoke, A.U.**, 2009. Forestry Extension: Implications for forest protection. *International Journal of Biodiversity and Conservation*, Vol 1(5), pp. 98 – 104.

Bagachwa, M.S.D., 1992. Background, Evolution, Essence and Prospects of current economic reforms in Tanzania, In: Bagachwa, M.S.D., Mbelle A.V.Y. and van Arkadie B. (Eds): Market reforms and parastatal restructuring in Tanzania. Economics Department and Economic Research Bureau Univ. of Dar es Salaam.

Basu, A., R. Blavy and **M. Yulek,** 2004. Microfinance in Africa: Experience and Lessons from selected African countries. IMF Working Paper No. 04/174. International Monetary Fund.

Commission on Climate Change and Development, 2009. Closing the Gaps. Final Report of the CCCD. Stockholm.

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

FAO. 1978. Proceedings of the 8th World Forestry Congress. Djakarta. Indonesia.

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. 566 p.

FAO, 2002. Forestry Outlook Study for Africa Report. FAO and the African Development Bank.

FAO, 2009. National Forest Monitoring and Assessment – Manual for integrated field data collection. Version 2.3. National Forest Monitoring and Assessment Working Paper NFMA 37/E. Rome.

FAO, 2010. NAFORMA Field manual-Biophysical Survey. FAO-Finland Forestry programme. Compiled by Vesa, L., R.E. Malimbwi, E.Tomppo, E. Zahabu, S. Maliondo, N. Chamuya, E Nsokko, J. Otieno, S. Dalsgaard. National Forestry Resources Monitoring and Assessment of Tanzania (NAFORMA). NAFORMA Document, pp85.

FBD. 2007. National Forestry Resources Monitoring and Assessment for the period January 2008 – December 2010, Forestry and Beekeeping Division, Dar es Salaam, 39pp.

FBD. 2009. Elaboration for and Designing of Systems for Logs Sales and Tracking, Forest Products Exports and Forest Royalty Setting, Final Report. Forestry and Beekeeping Division, Dar es Salaam.

Frühling, **P.** and **R. Persson**, 2001. Lessons for Change. Getting More from International Forestry Assistance. CIFOR and Sida.

Gondo, **P**., 2009. The potential role of microfinance in sustainable forest management. A paper presented at the World Forestry Congress held in Buenos Aires, Argentina, October 2009.

Government of Sweden, 2007. Sverige och Afrika – en politik för gemensamma utmaningar och möjligheter ("Sweden and Africa – a policy for joint challenges and opportunities"). Regeringens skrivelse 2007/08:67.

Ingemarson, F., B. Lundgren and **R. Persson**, 2008. Utveckling av den svenska resursbasen för internationellt skogligt arbete. ("Development of the Swedish Resource Base for International Forestry Work"). KSLA Tidskrift Nr. 4 2008.

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 (1). Blackwell Publishers Ltd. pp. 23 – 31.

Katila, M., P.J. Williams, R. Ishengoma and **S. Juma**, 2003. Three Decades of Swedish Support to the Tanzanian Forestry Sector. Evaluation of the period 1969-2002. Sida Evaluation 03/12.

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.

KEFRI. 2009. Strategic Plan 2008–2010. Kenya Forestry Research Institute.

Kihiyo Vincent B.M.S. 1998. Forest Policy Changes in Tanzania: Towards Community Participation in Forest Management. Case study: The World Bank/WBI's CBNRM Initiative. Sokoine University of Agriculture, Morogoro, Tanzania.

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. Modernising institutions to promote forestry development. Unasylva No. 95 Vol. 23 (4).

King K.F.S., 1975. Forest policies and national development. Unasylva winter 1974/75: 9-13.

Kowero, G., B. Campbell and U. Rashid Sumaila (Eds.), 2003. Policies and Governance Structures in Woodlands of Southern Africa. CIFOR.

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

Lundgren, B., 2009. Development of forestry in Sweden – any lessons for Africa? *Discovery and Innovation* Vol. 21 (SFM Special Edition No.1) April 2009, pp. 66-75.

Lundgren, B., R. Persson and S. Norén, 2011. Swedish-African forest relations. AFF/KSLA. *KSLA Tidskrift* 2(150).

Merkell, B., J. Cedergren and **H. Liljeblad**, 2005. Development of National Forest Policies and Strategies. Phase II of an International Training Programme held in South Africa March 08-18, 2005. Final Report. Sida, National Board of Forestry and Ilexum Consulting.

Ministry of Natural Resources and Tourism (MNRT), 2006. A Study to Establishing Mechanism for Payment for Water Environment Services for Rufiji River Basin in Tanzania. Economic Research Bureau, University of Dar-es-Salaam, Tanzania. 177 p.

Ministry of Foreign Affairs Finland (MFAF), 2010. Private forestry and carbon trading Document. Embassy of Finland, Dar es Salaam, 16 pp.

National Board of Forestry, 1997. Development of the Swedish Forests and Forest Policy during the last 100 Years. The "Swedish Case" presented to the XI World Forestry Congress.

National Board of Forestry, 2000. Silva Provobis – forests for people. Forest and environment in Sweden.

Nega B., B. Adenew and **S. Gebre Sellasie**. 2002. Current land policy issues in Ethiopia. Ethiopian Economic Policy Research Institute, Addis Ababa, Ethiopia

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

Okoth-Ogendo, H. W. O. 1980. 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 decentralisation and devolution of natural resource management in French-speaking West Africa. *Unasylva* 199, Vol. 50, 23 – 27.

Organisation of African Unity/IUCN, 1967. African Convention for Nature Conservation.

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

Owino, **F.** and **A. Ndinga**. 2004. Lessons learnt on sustainable forest management in Africa: Study on forest administration and related institutional arrangements. A joint Initiative of the Royal Swedish Academy of Agriculture and Forestry, African Forestry Research Network and FAO Forestry Department. FAO Forestry Department.

Persson, R., 2003. Assistance to Forestry. Experiences and Potential for Improvement. CIFOR.

Persson, R., 2006. Ökad skogsproduktion i Syd – hot eller möjlighet? ("Increased forest production in the South - threat or opportunity?"). Swedish FAO Committee Report No. 3.

Republic of Uganda, 2001. The Uganda Forestry Policy. Ministry of Water, Lands and Environment, Kampala.

Republic of Mozambique, 2008. National Forestry Inventory 2005–2007. Integrated Assessment of Mozambique Forests. Ministry of Agriculture. National Directorate of Lands and Forests 8pp.

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

Roos, A., E. Corell, K. Eckerberg, I. Tikkanen, B. Solberg and **R. Persson** (eds.), 2005. Proceedings of Nordic Workshop on International Forest Processes. KSLA 16-17 September, 2004. Department of Forest Products and Markets, SLU. Report No. 22.

Rouja, J., B. Cau and **S. Norfolk**. 2004. Forestry Legislation in Mozambique: compliance and impact on forest communities. Forest Governance Learning Group. Terra Firma Lda. Maputo/IIED.

Royal Swedish Academy of Agriculture and Forestry, 2009. The Swedish Forestry Model. A presentation brochure.

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.

Sida, 2009. Forest Certification. Advanced International Training Programme – 2009. Presentation brochure.

Skogsindustrierna, 2008. Skogsindustrin – en faktasamling (The Forest Industry – a summary of facts). The Swedish Forest Industry Federation.

Sunderlin, W. D., J. Hatcher and **M. Liddle**. 2008. From Exclusion to Ownership? Challenges and Opportunities in Advancing Forest Tenure Reforms. Rights and Resources Initiative. Washington DC. ISBN 978-0-615-21808-3.

Sustainable Forest Management in Africa Project, 2006. "Development of SFM in Sweden – any lessons for Africa?" Policy Brief No. 12.

Swedish Forest Agency, 2007. The Swedish Forest. A compilation of facts on forests, forestry and the forest industries in Sweden.

Swedish Forest Agency, 2008. Swedish Statistical Yearbook of Forestry 2008.

Swedish University of Agricultural Sciences, 2008. Climate Change - local adaptation under further stress. Special Issue of Currents 44/45.

Tanzania Ministry of Natural Resources and Tourism, 2006. Study report on Payment for Water Ecosystem Services (PWES) by the Economic Research Bureau of the University of Dar es Salaam.

Transatlantic Taskforce on Development, 2009. Toward A Brighter Future: a trans-atlantic call for renewed leadership and partnerships in global development. Co-chairs Gunilla Carlsson and Jim Kolbe. The German Marshall Fund of the United States.

UNCED, 1992. United Nations Conference on Environment and Development. Rio de Janeiro, 3-14 June 1992.

UNEP, 1999. Global Environment Outlook 2000. United Nations Environment Programme. Nairobi. Kenya.

United Republic of Tanzania, 1998. National Forest Policy. Ministry of Natural Resources and Tourisms. Government Printer, Dar es Salaam.

United Republic of Tanzania 2001. National Forest Programme in Tanzania, 2001–2010. Ministry of Natural Resources and Tourisms, Forestry and Beekeeping Division, Dar es Salaam, 134pp.

United Republic of Tanzania 2002. Forest Act. Act No. 14 of 2002. Ministry of Natural Resources and Tourisms. Government Printer, Dar es Salaam.

Westoby, J.C., 1985. Foresters and politics. The Commonwealth Forestry Review 64 No. 2: 105-116.

WGCF-NR, 2009. A Chronicle issues. Wondo Genet College of Forestry & Natural Resources.

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 – 1.