Toward a Strategy for Sustainable Trade and Management of Forest Products and Services in the COMESA Region

Tony Cunningham, Laura German, Miti Chikakula, Fiona Paumgarten, Chris Barr, Krystof Obidzinski, Thomas Yatich, Meine van Noordwijk, Ruben de Koning, Herry Purnomo and Atie Puntodewo

COMESA’s interest in developing a forestry strategy comes at a strategic time. Africa’s economic growth is projected to grow at its best rate since the 1970’s. Due to the important role of forests to rural livelihoods, the value of forest products trade and critical ecosystem services provided by forests need to be more fully appreciated. As the joint CIFOR-COMESA report, Sustainable Trade and Management of Forest Products and Services in the COMESA Region: An Issue Paper shows, forest product trade policies and management strategies are an important part of COMESA’s sustainable economic development agenda. Expanded trade in forestry and other sectors often carries significant social and environmental costs which need to be managed, however. Anticipating and monitoring the impacts of economic policies, trade deals and strategic investments in forestry and other sectors can help policy-makers better plan for economic development in ways that are profitable, socially just and environmentally sustainable.

Figure 1: Forest and woodland cover in mainland Africa and Madagascar showing national boundaries of COMESA member states.
Although many policymakers consider crop and livestock production to be the major contributor to livelihoods in the COMESA region, this is not always the case. In parts of the miombo woodlands, for example, forestry is the highest income earning sector for local livelihoods, contributing up to 54% of total gross income. In northern Zambia, crop production, wage labour and livestock were shown to provide 25, 15 and 6% of household income, respectively, with a larger proportion of forestry products destined for market. Even in Sudan, a country with relatively low forest cover, forestry contributes 71% of national energy supplies, 14% of rural employment, 33-70% of the national feed requirement (depending on season) and up to 30% of household income (Abdelazim, personal communication). In many parts of Africa, economic contributions from forestry have yet to be assessed.

**Forest Products in the COMESA Region**

*Timber.* The Democratic Republic of Congo (DRC) is the major tropical log exporter within COMESA and one of the top five exporters globally. Only African countries continue to export a high volume of logs as opposed to processed products, missing out on a significant opportunity for value-added processing. China and India have successfully captured this market (Figure 2), with China a major re-exporter following processing. While the proportion of unprocessed timber exports from the region has reduced to under 20% as processing capacity has expanded, many COMESA member States continue to lose value from the export of unprocessed logs. Capturing value from the timber trade is also undermined by high levels of illegal logging, corruption and unsustainable harvest. Plantations are providing an increasing proportion of timber products at a global scale, with roundwood harvests from plantations expected to increase to 44% of global timber production by 2020. Only 7% of tropical timber plantations (hardwood and softwood) are in Africa. While further plantation development should be pursued, caution should be taken to minimize negative effects (land displacement,
excessive water consumption, biodiversity loss) and to support smallholders to capture market opportunities (Photo 1).

**Non-timber forest products.** COMESA is a key supplier of economically-valuable non-timber forest products. As of 2002, Sudan was providing 62.8% of global supplies of gum Arabic, used in products ranging from Coca-Cola to perfumes, with France the major importer and re-exporter of processed products. The region is also a leading exporter of valuable flavours and fragrances such as frankinsense, opopanax and myrrh from Ethiopia, Eritrea, Sudan and Kenya. Although a “hidden economy”, trade in khat (*Catha edulis*) is estimated to contribute 13.4% of Ethiopia’s GDP while the Kenya-Somalia trade estimated at US$100 million/year. COMESA is also a significant exporter of medicinal *Prunus africana* bark, harvested from montane forests in Madagascar, Kenya, Burundi and the DRC for export to France and Italy. Kenya is a globally significant producer of woodcarvings, with 50,000-60,000 carvers generating around US$20 million in exports per year. Speciality foods including honey, indigenous fruits, dates, edible greens, bush meat and edible caterpillars are also traded regionally and bring significant value to the sector.

**Wood fuel.** Traditional biomass energy accounts for 40 to 90% of all energy consumed in sub-Saharan African countries (with the exception of South Africa). While global use of firewood is tapering off, use of charcoal is growing. Between 2000 and 2030, the number of people relying on biomass for cooking and heating is estimated to increase by 41% to 823 million people. Domestic markets for wood fuels provide an inexpensive source of energy for Africa’s poor while creating employment opportunities near urban centres. The production and marketing of firewood and charcoal (Photo 2) is estimated at $5 billion dollars annually in Zambia alone, employing more than 400,000 people. Past efforts to reduce impacts of wood fuel use on forests (plantations, energy efficient stoves, subsidies, fees) have been largely unsuccessful, suggesting the need for innovative and multi-pronged strategies to ensure sustainable energy supplies.

**Biofuels.** The rising demand for renewable energy has generated great interest in Africa as a new frontier for biofuel production: African countries are assumed to have large expanses of unutilized land, high levels of unemployment and cheap labor. These optimistic views are backed by an understanding of the particular suitability of *Jatropha curcas* in the region for its ability to adapt to conditions of low soil fertility and moisture. However, the anticipated scale and nature of benefits is largely based on speculation. Little is known about the potential of biofuels or *Jatropha* to address the energy needs of Africa’s poor, their financial and economic feasibility, or their social and environmental costs – which can be substantial. Any look into the potential of biofuels should consider not only future revenue, but the full range of costs and benefits.

**Forest Ecosystem Services in the COMESA Region**

Forests provide critical ecosystems services, including carbon sequestration, watershed protection and biodiversity. Although these services represent a capital asset to each COMESA country, the long-term benefits that could be derived from wise management of these assets are often absent in conventional economic indicators. As tropical deforestation progresses and water-intensive land uses expand, forest ecosystem services – formerly provided for free as a “subsidy from nature” – are becoming increasingly scarce. Interest in the idea of paying others, such as communities on forested land, to provide environmental services on a sustained basis is growing.

**Carbon.** Forests will play a major role in climate change mitigation efforts because deforestation and forest degradation contribute an estimated 20% of global carbon emissions. Forestry can contribute to climate change mitigation either through reduced emissions from conservation of existing carbon sources, or through increased carbon sequestration from reforestation. The current instrument supporting carbon sequestration in developing nations is the Clean Development Mechanism. While generating much interest within the forestry sector for the potential of such projects to raise much-needed income and revenue, expectations have been largely unmet due
to the transaction costs, uncertainties and risks of forestry-related CDM projects. While some countries in eastern and southern Africa are experimenting with voluntary (non-market) transfer payments for afforestation, most attention is now going to the potential of a new instrument – Reduced Emissions from Deforestation and degradation (RED) – under the second international climate treaty to come into effect in 2012. RED is focused on conserving existing forests rather than creating new carbon sinks, and is therefore of most interest to forest-rich COMESA member countries. Yet secure land tenure and participation of communities in the design of payment redistribution mechanisms will be required for forest-dependent communities to benefit.

Watershed functions. The COMESA region encompasses twelve of the nineteen major watersheds in Africa. About 66 large cities in the region rely on watershed services. Forest cover can potentially influence a number of “watershed functions,” including:

- Total water yield, or the proportion of rainfall making it ways into streams and rivers;
- Buffering of peak rainfall events by providing temporary water storage;
- Infiltration and gradual release of groundwater during dry periods;
- Filtering of rainfall and provision of high quality groundwater; and
- Reduction of erosion and landslide frequency.

For most of the above services, degradation can be relatively rapid while recovery tends to be slow. Contrary to popular perception, trees tend to be net consumers of water but may help conserve water through indirect means (e.g. soil conservation). Cultivation of fast-growing (generally, exotic) trees in particular tends to reduce groundwater availability and exacerbate water shortages in the dry season. Protecting old-growth forest implies protection of soils and vegetation with relatively low growth rates and water use, and may thus provide a real environmental service that is not easily replaceable. Most watersheds in the COMESA region are surrounded by highly productive mountain regions, supporting 80% of the rural population. The importance of these areas in supporting the livelihoods of the rural poor suggests that while strict controls over use of catchment areas may be appropriate for the private sector, payments for ecosystem services (e.g. water-conserving land uses) may be the only just solution for reconciling rural livelihood needs with watershed function.

Biodiversity. Many of the world’s “jewels” of biodiversity conservation are contained within COMESA countries. Congo Basin forests are globally significant reservoirs of carbon and biodiversity, with many plant and animal species that exist nowhere else in the world. Caesalpinoid woodlands (including the miombo woodlands) also occur in the COMESA region and cover about 3 million km² across south-central Africa. The endangered Indian Ocean Island forests have a high degree of endemism due to their isolation from the mainland, with Madagascar’s forests (home to 10-12,000 plant species) being the world’s highest biodiversity conservation priority and the location of major recent extinctions. Ethiopian and East African Montane forests and Northern Zanzibar-Inhambane coastal forests, also endangered, are global conservation priorities. Desert and xeric shrublands occurring within the COMESA region are the source of a host of non-timber products in trade, mainly gums, resins and seeds of endemic plants prized internationally by horticultural collectors. Implementing systematic conservation plans at an Africa-wide scale would cost about 0.1% of African Gross National Income (with costs per area highly variable across ecoregions), and significant international support is available for this purpose.

Challenges and Opportunities for Harnessing the Economic Potential of Forests

While such wealth of natural resources provides important opportunities for expanded trade in the forestry sector and for forestry-driven economic development, a number of challenges hinder efforts to capture this opportunity.

Managing International Demand for Forest Products.

Over the last 10 years, the “global East” has made...
extensive in-roads into Africa’s forestry sector. In exchange for development aid and as part of package deals combining trade agreements on a range of products (oil, gas, minerals and agricultural products in exchange for infrastructure and low-cost manufactured goods), for example, China has been able to secure vast forest concessions as well as increased timber exports to fuel its expanding economy. Where increased demand overlaps with weak governance and corruption, the potential contribution of the sector to both the local and national economy is undermined. Domestic and foreign industries alike also place pressure on forests through consumption of forest products (e.g. tobacco, mining) or through forest conversion (e.g. agriculture, biofuels) (Photo 3). Urgent efforts are needed to assess and project levels of demand for timber and wood fuel and plan for sustainable provision through plantations and smallholder forestry, so that economic development does not undermine rural livelihoods and provision of critical ecosystem services from forests.

Illegality, Corruption and Conflict. Globally, illegal logging costs governments at least US$10 billion in lost revenue and further depresses timber prices. Illegal logging and corruption have resulted in revenue losses of up to 96% in some places. In addition to undermining future economic development opportunities, corruption depresses the official value of the sector and contributes to its economic and political marginalization (for example, from national economic development strategies). In some cases, illegal trade in forest products drive and are driven by violent conflict. Two major multilateral processes are under way in Africa to mitigate illegal logging. The first is the World Bank-sponsored Africa Forest Law Enforcement and Governance (AFLEG) process, which strives to strengthen partnerships between producers and consumers, donors, civil society and the private sector to address illegal forest exploitation and trade in Africa. The second is the EU-sponsored Forest Law Enforcement, Governance and Trade (FLEGT) initiative, which seeks to strengthen timber legality standards in producer countries, improve the effectiveness of forest law enforcement and ensure greater adherence to EU timber import legislature. Collaborative efforts are needed to translate commitment into action at regional level, given the trans-boundary nature of illegal logging and conflict.

Intellectual Property Rights and Certification. Development of commercial products from naturally occurring genetic resources or biochemical processes (“bioprospecting”) is typically a long, expensive and uncertain process, with a chance of only one in 10,000 plant species yielding a “block-buster” product. Guidelines for access and benefit sharing under the Convention on Biodiversity (CBD) has created policy support for enhancing revenues from biodiversity conservation through public-private partnerships for natural product development (Photo 4). Product “branding,” certification and eco-labeling of forest products are other tools for capturing greater value from marketed products.

Knowledge Management. Information plays a fundamental role in guiding decision-making through synthesis of lessons from past experience and through monitoring of changes resulting from policy reforms, investments and trade agreements. For trade to lead to positive outcomes for poverty alleviation and environment, social and environmental considerations must be integrated into the negotiation, design and implementation of trade policies and trade agreements. Sound scientific evidence at the stage of planning and monitoring can go a long way in fostering synergies between economic development, equitable benefits capture and environmental sustainability.

Recommendations for COMESA

1. Support sharing of lessons and “best practice” in the sector through structured information sharing and strategic research to capture lessons on strategies that support rural livelihoods, sustainable forest management and the sector’s contribution to national development and poverty alleviation.
2. Support the mainstreaming of forestry into national level CAADP Compacts and poverty alleviation strategies (e.g. efforts to achieve the MDGs, AGRA), so that forestry’s contribution to livelihoods and cross-sectoral linkages (e.g.

Photo 3. Wood stockpiled outside a tobacco processing plant near Lilongwe. Use of indigenous timber for fuel has nearly wiped out Malawi’s natural forests, creating an urgent need for planning to match demand with supply and regulate corporate practice.
forest-agriculture, forest-mining, forest-energy, forest-water) feature more prominently in these plans.

3. Foster regional cooperation and strategic investments to add value, retain value at diverse scales (local, national, regional), and expand forestry-related trade and investment. This should include strategic investments to assist smallholders to capture market opportunities: credit, training, support to social organization and negotiation of mutual-benefit company-community partnerships.

4. Assist member States in the identification of “friendly markets” that can help bear the costs of forest governance, and support and recognize their efforts to give these markets preferential trade status.

5. Design an instrument for full accounting of the value of the sector, and support member States in its application, to raise the profile of the sector nationally and regionally.

6. Develop a framework to evaluate (ex-ante and through periodic monitoring) the impacts of strategic decisions (policies, trade agreements, investments) on revenue generation, job creation, environment and social well-being so that the relative benefits and costs of alternatives can be adequately assessed and fed back into decision-making; support member states to adapt the framework and institutionalize its use. This framework could be used to evaluate options across sectors, or help capture impacts of decisions made in any sector or industry affecting forests (agriculture, mining, energy, construction) on forest products, ecosystem services and forest-based livelihoods.

7. Develop and support the evaluation and improvement of policies for joint management of forest reserves and forest-dependent wildlife along boundaries of member states in collaboration with the African Union and conservation organizations (IUCN, WWF).

8. Enhance gains and minimize losses from foreign investment through cross-sector coordination in trade negotiations, regional cooperation for controlling illegal cross-border trade in high-value and endangered forest products, and support to mutual-benefit company-community partnerships. Explore the possibility of a regional negotiating block to secure more favourable trade deals for the sector and stakeholders depending on it.

9. Support decisive moves by member States to secure unambiguous, equitable and enforceable tenure rights (communal, public and private) in forest areas to strengthen incentives for sustainable forest management; restrict State regulatory functions to areas providing critical ecosystem services; and strengthen the capacity of local institutions to take advantage of their rights to improve livelihoods equitably and sustainably.

10. Support the mainstreaming of forestry into joint river basin management programs (e.g. the Nile Basin Initiative, the Zambezi River Basin Initiative) to support priority watershed functions of member States while meeting rural livelihood needs in catchment areas.

11. Support collaboration in research and capacity building in the forestry sector to enhance cost sharing and to achieve economies of scale; support the mainstreaming of forestry into agricultural research and development capacity development programs (e.g. SCARDA; BASIC).

12. Support African peace-keeping processes, without which many forest-product trade reforms and economic development are not possible.