The study on which this policy brief is based attempted to examine the wood based industry for the whole of Sub-Saharan Africa (SSA). However, due to the lack of sufficient and reliable data on the wood processing industries in many SSA countries, the study concentrated on developments in the main tropical timber producing countries in Central and West Africa. As a result of their membership of the International Tropical Timber Organisation (ITTO), these countries are frequently included in various ITTO studies making it possible to gather reasonable information on the industry. Together, these countries account for 15% of the global tropical forest area and 86% of the total forest area of West and Central Africa. As the only SSA country with an economy that is well integrated in the global economy, information also exists and was collected on South Africa’s significant wood processing sector (which is based primarily on industrial tree plantations) with wood pulp and paper being the main products.

Africa has about 650 million hectares of forests, which is 16.8% of the world's forest area. All of 98.8% of the African forests are natural forests. About 8 million hectares are plantations, of which 42% are industrial. Only about 9% of the roundwood is processed and consumed locally or exported, while 91% is used as fuel. In terms of population distribution, the most densely populated countries are the least forested and vice versa. For example, the most forested countries, accounting for about 43% of Africa’s forests, support about 11% of its population. On the other hand, the least forested countries, which account for about 1.5% of Africa’s forests, support about 26% of the population.

Between 1980 and 2000, the value of worldwide exports of all forest products rose from about US$57 billion to US$143 billion, of which Africa's share was US$1.6 billion and US$2.9 billion, respectively. Africa's exports are mainly industrial roundwood and to Europe; for example, in 1998 Africa supplied 99% of tropical logs and 53% of tropical sawnwood imported to Europe. Asia and China are increasingly becoming important importers. Africa exports low value added products and imports high value added products. The bulk of wood import is from Western Europe, with wood products import from Eastern Europe and Asia being on the increase. In terms of value of imports, the main importing countries are all in North Africa, i.e. Algeria, Egypt, Morocco and Tunisia, which account for about 72% of Africa's imports. In SSA, South Africa, Nigeria, Senegal and Côte d'Ivoire are notable importers. Intra-African trade in roundwood and wood products remains negligible. The picture is one of vast resources that contribute little to pan-African trade as well as to processed product exports outside the continent.

These concerns led to the commissioning of a study as part of the initiative on Lessons Learnt on Sustainable Forest Management in Africa. The main objective of the study was to examine the following issues in relation to the development of wood based industries in Sub-Saharan Africa:

• the current state of the development of wood based industry in SSA and what factors determine the inter-country differences among wood based industries and their contribution to income and employment;

• success stories pertaining to the development of the major types of industries: saw-milling; production of plywood and panel products (including veneer sheets); pulp and paper; and production of secondary wood products (especially furniture); including factors that have contributed to their success;

• the extent to which these industries have contributed to employment and income generation;

• the technical, economic, policy and institutional issues that have influenced the development of wood processing, including constraints and how they have been addressed;

• the prospects of small-scale wood industries, especially saw-milling and furniture production, primarily to create rural employment;

• the impact of economic liberalisation policies on wood based industries in Africa; and,

• how African wood industry can adapt to the changes in the global demand and supply of wood and wood products and increase its share in the trade.

The report by Kwame Asumadu is available on AFORNET’s website: www.afornet.org

SOME KEY ISSUES TO BE ADDRESSED

Declining forest resources

The wood raw material situation in the major ITTO countries considered in the study is shown in table 1. With the exception of Gabon, further processing in the major producer countries is based on a limited number of commercial species, whose availability is declining fast. This in turn constrains growth in processing capacity and profitability. Lesser used species may provide additional opportunity, but there is limited knowledge on their properties and utilisation options in the major consumer markets.

The slow rate of establishing well managed industrial tree plantations is also a major constraint to further processing in SSA because the diminishing natural forest resource base cannot support industrial growth.

Competitiveness in international trade

Historically, low domestic input costs (labour and raw material) have provided a competitive advantage for SSA forest and wood products processors. Over the years, this has been reduced by the high costs of imported inputs such as machinery, spare parts and fuel. The ability to transport semi-finished products...
efficiently over long distances has also removed the advantage previously provided by low labour and raw material costs. Comparative advantages derived purely from a rich raw material endowment and low input costs tend to decline with the increasing degree of processing.

**Limited ability to improve technology**
The industry is fragmented, constraining the development and implementation of coherent industrial strategies. The majority of equipment used in the wood processing sector in SSA is obsolete, making it impossible to manufacture products to international commercial and industrial standards.

**Potential for poverty alleviation**
Information available suggests that only a few countries have an explicit recognition in their national policies of using the country’s forest resources to improve the standard of living of forest-dependent communities. This is increasingly becoming important as countries implement Poverty Reduction Strategy Papers (PRSPs) that serve as a blueprint for socio-economic development. The forestry sector has to argue its case well in the PRSPs if it is to attract investments.

**Prevalence of illegal logging**
Illegal logging is a major problem and governments are either unwilling or unable to control it because it is one of the main sources of wealth creation and employment generation in the informal sector of many developing country economies. This problem is a symptom of poor governance and weak institutions that are characteristic of many countries in Central and West Africa.

**Changes to the international trading agreements**
As global trade liberalisation measures from the conclusion of GATT and WTO negotiations take effect, they are likely to put further pressure on the already diminishing share of Africa’s trade in forest and wood products. Free trade measures will have the effect of removing any protection to Africa’s wood processing sector offered by tariffs. With the inability to increase its own share in the international trade, any additional demand created in African countries for further processed wood products, such as furniture and paper products, would probably be taken up by imports.

**Inadequate skilled workforce**
There is a lack of well-trained managers to provide the leadership necessary for successful development of enterprises. To compound this, the HIV/AIDS pandemic is decimating professional, technical and supporting staff in forestry, and changing the demographics of users of forest products. The resulting scenario is one of a serious imbalance between a small cadre of young and less experienced staff on one hand, and well-trained and experienced ageing staff on the other, a result of both economic reforms and the pandemic.

### LESSONS LEARNT

**Gap between demand and supply of forest resources**
Previous over-harvesting has, in most cases, depleted the forests of stocks of large logs, and forced the industry to increasingly depend on re-growth, secondary forests and plantations.

**Lack of incentives to invest in modern equipment and in secondary processing**
There is lack of capital to re-tool equipment given that most of the existing sawmills are geared to the processing of the rapidly diminishing large logs. There is scanty harvesting of small logs, secondary processing, and use of residues.

The industry is dominated by foreign investors, with a number of them having processing facilities in

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<table>
<thead>
<tr>
<th>Country</th>
<th>Forest area ('000 ha)</th>
<th>Potential wood fibre supply 2010 compared to 1996 potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural</td>
<td>Plantation</td>
</tr>
<tr>
<td>CÔTE D’IVOIRE</td>
<td>5,603</td>
<td>66</td>
</tr>
<tr>
<td>GHANA</td>
<td>8,969</td>
<td>14</td>
</tr>
<tr>
<td>CAMEROON</td>
<td>19,582</td>
<td>23</td>
</tr>
<tr>
<td>DR CONGO</td>
<td>109,203</td>
<td>42</td>
</tr>
<tr>
<td>CONGO</td>
<td>19,500</td>
<td>37</td>
</tr>
<tr>
<td>TOGO</td>
<td>1,245</td>
<td>6</td>
</tr>
<tr>
<td>GABON</td>
<td>17,838</td>
<td>21</td>
</tr>
<tr>
<td>CAR</td>
<td>29,924</td>
<td>6</td>
</tr>
<tr>
<td>LIBERIA</td>
<td>45,000</td>
<td>6</td>
</tr>
</tbody>
</table>

*Table 1 Resource status in major ITTO African countries.*
their own countries and therefore with little incentive to invest in such facilities in the exporting countries.

**Increased illegal forest activities and trade has constrained investment**

The challenges to the formal sector from illegal logging are:

- it undermines prices on the domestic markets;
- it competes with the formal sector for logs, and in some situations forces the formal sector to purchase logs at high prices thus increasing their cost of production and reducing their export competitiveness;
- it contributes to unsustainable harvesting practices and undermines incentives for the formal sector to adopt sustainable forest management practices;
- it reduces the income available to national budgets, thus limiting further the capacity of governments to implement sustainable management practices as well as fund other national socio-economic development activities.

Ultimately, reducing illegal logging depends on the extent to which government policies can make such operations more costly and less profitable than legal operations.

**Existence of highly specialised niche markets that command premium prices**

The competitive advantage SSA producers appears to be due to the predominance of relatively lighter timbers compared with the heavier, utility timbers of tropical Asia and South America, and to less colour variation between species. This is important for European and North American markets where uniformity of colour is an important consideration for the majority of consumers.

Further, success on export markets also requires reliability of supply as well as the ability to meet tighter and often complex client specifications and requirements. SSA processors are generally unable to meet these requirements, due to the high cost of equipment, unskilled workforce and poor infrastructure.

**Declining influence of tariffs and non-tariff measures**

Significant progress has already been achieved on reducing tariffs on primary processed and further processed wood products, although they still remain at a high level. Where topical timbers directly compete with temperate timbers in international markets, non–tariff trade barriers are often used by the affected countries to limit market access.

**Need for certification?**

In 2002, certified forests in Africa totalled 2.7 million hectares and represented only 3% of the global total, with the Congo having the largest certified forest of some 1.15 million hectares. Europe and North America had, respectively, 54% and 38% of certified forests. Latin America and Asia-Pacific had each 2% of the certified forests in 2002.

Some of the major constraints to a wider application of certification in SSA include the fact that governments (the owners of the majority of forest and forestry authorities) are not yet convinced of the importance of certification in increasing market access for forest and wood products. The high cost of certification overall and particularly implementing it in tropical Africa has given the private sector (comprising mostly of European multinationals) little incentive to enter into certification processes. The weakness of indigenous African NGOs and other civil society organisations to integrate this new concept and make it a major priority and the lack of national expertise

Many countries in West Africa have prohibited export of logs to stimulate the local processing industry.
to carry out the activities related to certification also contribute to the slow adoption. For the foreseeable future, all indications are that certification is unlikely to be an important priority for the wood processing sector, except in isolated cases.

THE WAY FORWARD

Policy and institutional changes to promote investment

The role of governments should be supportive and facilitative in creating a conducive environment for increased investment in forestry by the private sector. Some of the important roles governments can play to assist increased industrialisation in the sector include:

- ensuring resource security to stakeholders,
- guide development through sector policies and plans,
- facilitating or supporting research and training, and,
- implementing policies that will stimulate product and services demand and growth of markets for sector products as well as reducing risks to investments in the sector.

Liberal economic policies, incorporating strong fiscal and financial incentives, are necessary for SSA countries to attract foreign investment. New and innovative government policies should facilitate the work of indigenous entrepreneurs in mutually productive partnerships with foreign investors. These investments can also change the technology currently employed in the sector, to make it more appropriate to socio-economic development of the sub-continent.

Institutional changes involving commercialisation of and financial autonomy for the Ghana Forestry Commission, for example, appear to have had a positive impact on the wood processing sector in that country. Less government control and increased private sector participation in the industry in Côte d'Ivoire also appears to have increased domestic value-adding achieved by the country. Institutional and policy changes have also started to be implemented in the Congo Basin countries and they need to be embraced by other SSA countries as well.

Creating and supporting local entrepreneurship

SSA does not lack entrepreneurship. This is demonstrated by the, albeit, limited success achieved in some of the main producing countries by indigenous processors in entering export markets. The main constraint to indigenous entrepreneurship relates to the lack of enabling environments underpinned by government policies that can develop and nurture entrepreneurs. However, developing country governments tend to overlook small to medium enterprises (SMEs) in policy making because they largely operate in the informal sector. In more advanced countries, SMEs have generally been the spawning ground for entrepreneurs. While large enterprises are important, SMEs are the major source of employment and wealth also in more advanced countries. Being small and flexible, they can be innovative without incurring large overhead costs. Also being labour-intensive, small scale enterprises are even better placed to contribute to the general socio-economic development of SSA countries than larger enterprises.

Promotion of regional markets

Demand for processed wood in the resource deficit regions of Southern, Eastern and Northern Africa could provide a boost for increased further processing in Central and West Africa. For this to occur, SSA countries would need to implement measures to eliminate obstacles, such as poor transport and shipping infrastructure, which are presently impeding intra-African trade. Also, governments would need to address the excessive costs on country-to-country trade arising from bureaucratic inefficiencies.

Regional markets, resulting from inter-country cooperation and regional integration are increasingly becoming important in SSA. Some of the most important ones are: Common Market for Eastern and Southern Africa (COMESA), the Economic Community for West African States (ECOWAS), the Economic Community for Central African States (ECCAS), the East African Community (EAC), the Economic and Monetary Community of Central Africa (CEMAC), Economic Community of the Great Lakes Countries (CEPGL), the West African Monetary and Economic Union (UEMOA) and the Southern African Development Community (SADC).

A common aim of these regional economic groupings is to increase trade through unifying and re-
Reducing customs duties. They provide the basis for developing future regional markets for intra-African trade in goods and services, including those from the forestry sector. Up to now, however, the usefulness of the regional groupings for intra-African trade in wood based products is limited because of poor infrastructure, particularly for road, sea and air transport.

**Increased use of the private sector, NGOs, industry and professional associations**

One of the principal roles of the private sector is to influence government policy positively for the benefit of the industry sector and contribute to local economic activity. A dynamic and well functioning processing sector provides the opportunity for the private sector to create wealth and increase employment using available forest resources. However, there are cases in SSA where the private forestry sector, driven by short term financial gain, has adopted a “resource mining” attitude and contributed to unsustainable harvesting practices. In some situations, the private sector has also undermined genuine government industry development policies by offering inadequate – for example, the current proliferation of obsolete equipment in the forest and wood products processing sector can partly be attributed to some private sector companies importing old equipment.

Environmental NGOs have been very effective globally in alerting civil society to unsustainable practices by both governments and the private sector. As domestic value adding increases in SSA, this watchdog role will continue to be important to ensure that the benefits of value-adding are achieved. NGOs continue to be effective in drawing the attention of governments in more advanced countries to some of the adverse impacts of “globalisation” on developing countries. Ensuring “fairness” in international trade, including that for forest and wood products, is crucial for SSA’s industrial development. Other important considerations involve workers’ rights and occupational health and safety issues. NGOs continue to play a very crucial role in these areas, and their contribution will continue to be important.

Industry and professional associations play an important role in lobbying governments and participating in policy development processes on behalf of their members. They are also important in transferring innovations and technologies to the industry. Often relationships with overseas counterparts provide useful market access and product and market intelligence information for their members. More importantly, they can be a catalyst for positive changes in the industry, including providing technical and managerial training. Industry associations and professional bodies can assist in achieving economies of scale by pooling together resources for the benefit of members, the forestry sector and the national economy as a whole. This has been successful in Ghana and could be done in other countries as well.

**The use of internet technology**

Increasingly, the internet is becoming an important facility for information exchange and international trade and commerce. It is a cost-effective means for providing real time information to existing and potential customers and to gaining access to markets. Governments can assist by facilitating access to the internet by local companies. The telecommunication infrastructure in many SSA countries is barely functional. Rather than continuing to rely on obsolete telecommunication technology, it may be cost-effective for governments to facilitate investment in, and access to, newer generation technology.