

Globalization

According to the Global Forest Resource Assessment for 2005 of the Food and Agriculture Organization (FAO), Africa has 635 million hectares (ha) of what is classified as forests, corresponding to about 21 percent of its land area. Africa's forest accounts for 15 percent of the world's forest areas, and the growing stock (volume) of the African forests is 65 billion m³ or about 15 percent of the world's growing stock. That is the good news.

The bad news is that, in many states of Africa, forests are under pressure. Overharvesting and other disturbances have taken their toll, resulting in declining forest area, growing stock, and biomass, as well as a degradation of the forests generally.

EXPONENTIAL GROWTH RATE During the past 10–15 years, the globalization rate has increased rapidly, driven by emerging economies like China, India, and Brazil: policy changes, liberalization of legislation, and implementation of new technologies like Information and Communication Technology (ICT) are among globalization's main forces. Indeed, globalization is often seen as "the bad guy," as an unfortunate effect of so-called progress.

Globalization, however, is far from being a contemporary phenomenon. In his 2007 book, *Bound Together: How Traders, Preachers, Adventurers and Warriors Shaped Globalization*, Nayan Chanda of the Yale Center for the Study of Globalization writes of globalization: "It has worked silently for millennia without being given a name and is probably as old as humanity itself, and as complex and unpredictable. It moves through a multitude of threads connecting us to far away places from an ancient time." In the 21st century, globalization represents the economic aspirations and desires of hundreds of millions of people around the globe and, of course, its effect is exponential. The more people that become involved, the faster globalization goes.

There are many definitions and meanings of globalization around. However, in this article we will deal with *economic globalization*, which we define as *integration of economic activities via markets*. Economic globalization, which can in turn drive social, cultural, and political globalization, affects most of the existing economic sectors of the world, including the forest sector.

So what will the increased globalization mean for Africa's forest resources? The global analysis carried out by IIASA's Forestry (FOR) Program with respect to production/utilization of forest industrial raw material in 2030 is illustrated for pulp logs and saw logs in the two charts (*right*).

AFRICA: FUTURE GLOBAL SUPPLIER As can be seen in the charts, FOR assesses that pulp log production in Africa will increase from the current 20 million m³/year to 75–90 million m³/year and saw logs from the current 35 million m³/year to 100–150 million m³/year. This strong increase in the industrial utilization of the forest resources is a result of the tight supply/demand situation at the global level. Africa will in the future take a larger part of the global supply—and this trend has already started. The more difficulties that countries such as China and India face in terms of wood supply from domestic sources and from traditional suppliers in Asia, the more they are turning to new suppliers in Africa and Latin America.

CHINA: IMPORTING MORE LOGS China, in particular, is carrying out substantial general investment programs in the countries in these two regions to get access to increased volumes, not just of forest resources but of other natural raw materials. It is currently importing

The increased utilization of Africa's forest resources, due to globalization, will substantially increase the pressure on them. Thus, measures need to be taken now to secure a sustainable utilization of industrial wood in Africa. Moreover, if the income from the increased export of forest products is wisely used and distributed, globalization can, in fact, contribute to Africa's development.

WHAT AFRICA AND EUROPE HAVE IN COMMON

Many globalization effects will have a similar impact on the future of European and African forest resources. The European Commission asked IIASA's Forestry Program to analyze the effects of globalization on the economic viability of Europe's forest sector. Findings include:

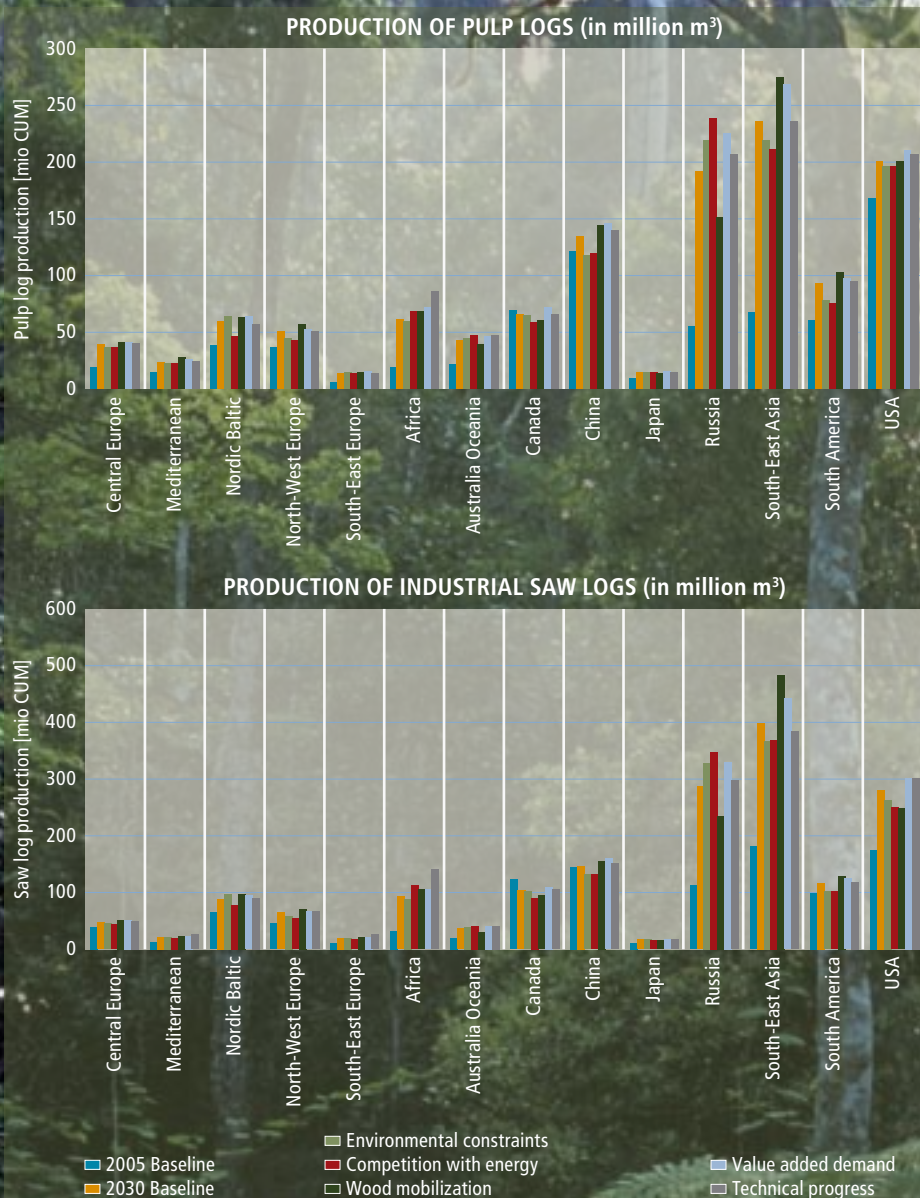
- The global footprint of growth (declining growth in the North and rapid growth in the South of consumption of forest products)
- Globalization of fiber markets (the supply of wood is becoming tight and triggers more trade and structural changes)
- Globalization of product markets (trade in forest products growing rapidly—faster than growth in production and consumption)
- Globalization of energy markets (energy demand driven by emerging economies causing a rapidly growing interest in bioenergy which, in turn, causes increased competition over wood raw material)
- Climate change (affecting future forest production, but also driving the demand for bioenergy in order to reduce emissions of greenhouse gases)

2.5 million m³ of roundwood equivalents of forest products from Africa per year, some 90 percent of which is in the form of logs. The major suppliers are Cameroon, Equatorial Guinea, Gabon, Mozambique, Republic of Congo, and Swaziland. This situation is mirrored in the European Union, India, and other countries and regions.

SUSTAINABILITY NEEDED The FOR analysis, represented in the charts above, shows this development growing rapidly, as globalization grows. The increased utilization of Africa's forest resources will substantially increase the pressure on them. That is why measures need to be taken now to secure a sustainable utilization of industrial wood in Africa. On the other hand, if the

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and Africa's forests



income from the increased export of forest products is wisely used and distributed, globalization can contribute to the development of the societies in the region, and Africa can gain from it.

FORESTS FOR ENERGY But it is not only the globalization of industrial wood products that will affect the utilization of the African forest resources. In parallel, the globalization of the energy markets is triggering increased use of wood and forest biomass for energy production. In its latest 2003 African Outlook Study, FAO finds that total roundwood production in Africa in 2030 will include production of wood for fuelwood and charcoal that is four times higher than the production of industrial wood. Industrial wood production will

be some 200 million m³ in 2030 according to IIASA's FOR study (see charts). This means that there will also be a tremendous demand for wood for fuelwood and charcoal consumption in Africa. The total utilization will be of the magnitude of 1 billion m³/year in 2030 compared to the current 650 million m³. ■

Further information Rametsteiner E, Nilsson S, Böttcher H, Havlik P, Kraxner F, Leduc S, Obersteiner M, Rydzak F, Schneider U, Schwab D & Willmore L (2007). *Study of the Effects of Globalization on the Economic Viability of EU Forestry*. Available at http://ec.europa.eu/agriculture/analysis/external/viability_forestry/index_en.htm.

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