Global Wood Markets: Consumption, Production and Trade

By Ed Pepke
Forest Products Marketing Specialist
UNECE/FAO Timber Section
Geneva, Switzerland
Presentation topics

I. Introduction

II. Where is the supply? Global forests

III. Where is the production? Where is the demand?

IV. Forest products trade
   - Primary
   - Secondary

V. Conclusions

VI. Discussion
1. Introduction

- Why’s this important?
  - Trends in demand and supply of wood products
  - Geographical shifts in production, consumption and trade
  - Position of Europe in global markets

- What forest products?
  - Wood vs non-wood
  - Traditional and new products

- Topical issues
  - Traditional, e.g. trade disputes
  - New, e.g. subsidies for wood energy
II. Global forests and forest products
Forests and deforestation

Net forest loss:
1990s 8.3 million ha/year
2000-2010 5.2 million ha/year

Sources:
Why deforestation?

- Conversion to other uses: agriculture, palm oil, pasture, urbanization
- Fire, insects, disease
- Root causes: poverty, firewood, illegal logging
- Offset by plantations and natural expansion
- Positive trend of a negative issue
Global roundwood harvests

- Rest of World: 36.1%
- Europe: 23.7%
- US: 21.1%
- Canada: 9.5%
- CIS: 9.5%

Source: State of the World's Forests, 2009, FAO.
Of 3.5 billion m³, slightly more than half is used as woodfuel.

Woodfuel use

Inefficient domestic heating and cooking

Increasing in developed world, but efficient, environmentally sound combustion.
Modern wood energy

- Efficient, clean combustion
- Carbon neutral
- Renewable energy
- Market outlet for low-grade fiber
Modern wood energy

- Processed fuels
  - Not bulky firewood
  - Conveyable chips (high moisture)
  - Dry, high calorie pellets and briquettes
- Next...
  - Biorefineries: pulp, energy, chemicals
  - Liquid and gaseous fuels
Production and consumption of wood pellets

Source: UNECE/FAO
UNECE region = Europe + N. America + CIS
UNECE roundwood harvests trends

Forest resources growing stock

- Europe (41)
- North America
- CIS

Billion m³

Growing stock
Net annual increment
Fellings

Source: Temperate and Boreal Forest Resources Assessment, 2000

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Net annual growth vs fellings

Source: Temperate and Boreal Forest Resources Assessment 2000
## Forests increasing in UNECE region

<table>
<thead>
<tr>
<th>Region</th>
<th>Fellings as % of annual growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Europe</td>
<td>61%</td>
</tr>
<tr>
<td>Nordics &amp; Baltics</td>
<td>72%</td>
</tr>
<tr>
<td>Northwest Europe</td>
<td>53%</td>
</tr>
<tr>
<td>Southeast Europe</td>
<td>45%</td>
</tr>
<tr>
<td>EU 27</td>
<td>60%</td>
</tr>
<tr>
<td>Russia</td>
<td>34%</td>
</tr>
<tr>
<td>North America</td>
<td>80%</td>
</tr>
</tbody>
</table>

Sources: *State of the World’s Forests*, 2007 and UNECE/FAO Forest Resources Assessment
Increasing forests & increasing demands

- Increasing demand for paper and paper products, e.g. packaging
- Increasing demand for wood products
- Increasing demand for wood energy
- = competition!
- Where will wood come from?
III. Consumption and production
World shaped by political boundaries

Source: Worldmapper

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World shaped by population
World shaped by forest products production

Sources: Worldmapper & FAOStat, 2009
World shaped by wood and paper consumption

Sources: Worldmapper & FAOStat, 2009
As shaped by forest products exports

Sources: Worldmapper & FAOStat, 2009
As shaped by forest products imports

Sources: Worldmapper & FAOStat, 2009

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Western European wood and fiber requirements through 2020

Gap is residues

Growing demand without energy

Source: UNECE/FAO
European Forest Sector Outlook Study, 2005
Industrial roundwood consumption

Source: FAOStat, 2010
Industrial roundwood production

Source: FAOStat, 2010
Sawnwood consumption

Source: FAOStat, 2010
Sawnwood production

![Graph showing sawnwood production for different continents over the years 2000 to 2008. The graph includes data for Africa, Americas, Asia, Europe, and Oceania. The source is FAOSTat, 2010.](source: FAOSTat, 2010)
Panels production

Source: FAOStat, 2010
Panels consumption

Source: FAOStat, 2010
Paper & paperboard consumption

Million metric tons

Source: FAOStat, 2010
What happens when supply does not equal demand?

IV. Trade
Global trade all products

Doubled in 6 years

Source: FAOStat, 2010
Europe leads in roundwood exports (including within Europe).

Globally exports = imports in value and volume, but not in direction!

Source: FAOStat, 2010
N. American roundwood exports

USA increasing roundwood exports

Source: FAOStat, 2010
CIS roundwood exports, mainly Russia

Trend reversal in 2008
- Log export taxes
- Global economic crisis

Source: FAOStat, 2010
African and Asian roundwood exports

Rising despite policies to encourage value-added processing

Source: FAOStat, 2010
US housing starts, 2002-2013

Source: APA – The Engineered Wood Association, 2009

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Impacts of US housing crisis

- Global economic crisis (a cause)
- Massive restructuring of N. American wood industry (unemployment)
- Local communities devastated
- Long-term consequences for forest sector
European exports

Source: FAOStat, 2010

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CIS exports, mainly Russia

4x in 10 years

Billion

Source: FAOStat, 2010

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Exporting primary vs secondary

- Primary (logs, sawnwood, panels, pulp) are commodity products
  - Easy to export
  - Correspond to market price
- Secondary, value-added products
  - Higher value and profits
  - Require greater manufacturing and marketing skills
Secondary-processed products exports

Source: FAOStat, 2010
China is the motor!

Based on domestic and imported roundwood
World’s largest exporter of wooden furniture
and other secondary-processed products

5x in 10 years, no downturn in 2008

Source: FAOStat, 2010
Paper products exports

Source: FAOStat, 2010
Sawn softwood exports

Source: FAOStat, 2010
V. Trade conclusions

- Global timber trade **doubled** over last decade
- Greatest increase in secondary-processed products
- Slowdown in 2008, 2009 with global economic crisis
- China became largest roundwood importer and largest secondary-processed products exporter
- Trade barriers distort markets
  - Export taxes, subsidies, tariff and non-tariff
  - Intentionally for national reasons
  - Consequences for partners’ forest sector
VI. Discussion
Ed Pepke
Forest Products Marketing Specialist
UNECE/FAO Timber Section
448 Palais des Nations
CH-1211 Geneva 10, Switzerland

Telephone +41 22 917 2872
Fax +41 22 917 0041
Ed.Pepke@unece.org
www.unece.org/timber