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FOREST PRODUCTS ANNUAL MARKET REVIEW 2006-2007

Executive Summary

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NOTE

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ABSTRACT

The UNECE/FAO *Forest Products Annual Market Review, 2006-2007* provides general and statistical information on forest products markets and related policies in the UN Economic Commission for Europe region (Europe, North America and the Commonwealth of Independent States). The *Review* begins with an overview chapter, followed by a description of government and industry policies affecting forest products markets. After a description of the economic situation and construction-related demand in the region, five chapters based on annual country-supplied statistics, describe: wood raw materials, sawn softwood, sawn hardwood, wood-based panels, and paper and paperboard. Additional chapters discuss markets for wood energy, certified forest products, value-added wood products and tropical timber. In each chapter, production, trade and consumption are analysed and relevant material on specific markets is included. Tables and graphs provided throughout the text present summary information. Supplementary statistical tables may be found on the Market Information Service website within the UNECE Timber Committee and FAO European Forestry Commission website.

Chapter 1
Wood energy policies and markets reshaping entire forest sector: Overview of forest products markets and policies, 2006-2007[1]

Highlights

- In 2006, United States house construction fell sharply, dragging down North American forest products markets, notably for sawnwood; however, stronger European and CIS markets pushed UNECE region consumption of wood and paper products to record volumes.
- Responding to climate change and energy security concerns, government policies in Europe and North America are accelerating woodfuel demand to meet targets for renewable energy.
- Rising demand for wood energy, in addition to the wood and paper industry's increasing demand for wood raw materials, necessitates mobilizing more wood, which is reshaping the entire forest sector, with long-term opportunities and short-term consequences.
- Certified forest area reached 292 million hectares worldwide by mid-2007, with most in the UNECE region, where in addition to wood, other products are being certified, including woodfuel and non-wood forest products.
- China now leads the world in both roundwood imports and furniture exports, which has stimulated imports of roundwood and sawnwood from the UNECE region, and is an existential threat for some of the region's furniture manufacturers.
- In Europe, strong growth in both production and consumption of sawn softwood occurred in 2006, with increased prices for sawlogs and sawnwood; conversely, North American markets fell and prices dropped.
- Investments in European wood processing capacity, at times with EU assistance and at times by multi-national companies, have created greater demand for industrial roundwood and more production of wood products for both domestic and export markets.
- Russia implemented a far-reaching Forest Code to improve the whole sector, and then initiated rising export taxes on roundwood in mid-2007; however, there were numerous start-up complications.
- A longstanding US-Canada Softwood Lumber Agreement was resolved with a new seven-year trade agreement in 2006, but it remains controversial.
- Germany became Europe's largest sawnwood producer in 2004, and its production of sawn softwood escalated again in 2006, by 12%; together with higher demand for wood for energy and other wood products, roundwood removals continued their rapid climb in 2006, by over 9%.

[1] By Mr. Ed Pepke, UNECE/FAO Timber Section.

Chapter 2
Policy issues related to forest products markets in 2006 and 2007[2]

Highlights

- Increased production of energy from woody biomass is generating intense interest on both sides of the Atlantic, with major incentives undertaken at all levels of government in North America and Europe to stimulate bioenergy investment and industry growth.
- The forestry and energy sectors are increasingly entering into joint ventures to realize potential synergies in bioenergy and biochemicals development.
- The emergence of the biomass energy industry presents an opportunity for forest owners and wood products manufacturers to diversify income sources; however, public policy development must balance both the established wood products sector and the new bioenergy sector.
- Russia enacted a new Forest Code in early 2007, which marks a fundamental shift in forest policy and brings sweeping changes to the control and management of forests.
- A Russian government decree in March 2007 dramatically increased duties on the export of logs, which could lead to significant realignment of current trading patterns, especially with China, Japan and Finland.
- Meeting increasing demands for wood raw materials throughout the UNECE region requires mobilizing additional wood resources consistent with principles of sustainable forest management.
- Chinese wood imports continued to rise in 2006, confirming China's status as the largest log importer, with the volume rising 9.5%, with over two thirds of which being imported from Russia, and one fourth from tropical forests.
- Corporate social responsibility (CSR), a little-known concept as yet in the global forestry arena, except as expressed through some forest certification programmes, is gaining traction, driven in part by the environmental standard of the International Organization for Standardization and the CSR standard.
- A January 2007 merger of Canada's principal forest products research organizations created one of the world's largest forest-sector research institutes.
- Universities within the UNECE region are increasingly teaming up with the energy sector in the conduct of bioenergy and liquid biofuels research.

[2] By Dr. Jim L. Bowyer, Dovetail Partners, Inc., USA; Dr. Helmuth Resch, University of Natural Resources, Austria; and Ms. Franziska Hirsch, UNECE/FAO Timber Section, Switzerland.

Chapter 3
United States housing downturn affecting many countries – positive trends in European housing: Economic developments affecting forest products markets, 2006-2007[3]

Highlights

- World economic growth has been quite robust and is expected to remain so although it is likely to slow down moderately in almost all regions in 2007 and 2008.
- Major downside risks to growth include higher interest rates, a depreciating dollar, a crash in global real estate markets, higher oil prices or an unexpected development concerning hedge funds or derivatives.
- Interest rates have been increasing throughout most of the world and this will probably depress the demand for housing.
- US housing starts fell by 13% to 1.8 million units in 2006, and are expected to fall another 18% in 2007, which seriously affects North American economies, and has consequences for the forest industries.
- An upturn in the US residential market is forecast, based on demographics, in 2008.
- There is a dichotomy in US construction markets, as non-residential markets grew 13.4% on a value basis in 2006 and are expected to expand by up to 10% in 2007.
- Prices of building materials in the US reflect these changes – wood products are down substantially from highs in 2004 and 2005; however, non-wood material prices continue to increase.
- European construction markets continue to expand, growing uninterruptedly for 13 years and another three years of growth is forecast, driven by 5.6% growth in new residential activity and 4.2% in civil engineering construction.
- New residential construction in Europe is expected to cool in 2007 and decline modestly in 2008, however, renovation markets will take up some of the slack and civil engineering will be the other growth sector during 2007-2008.

[3] By Dr. Robert Shelburne, UNECE, Dr. Al Schuler, USDA Forest Service and Mr. Craig Adair, APA – The Engineered Wood Association.

Chapter 4
Strong sawnwood and pulp markets push roundwood prices to record highs: Wood raw material markets, 2006-2007[4]

Highlights

- Wood raw material costs for the manufacture of sawnwood have shot up in many regions around the world in 2006 and 2007, with the global average softwood sawlog price reaching an all-time record high of $82/m^3 in 2007.
- During 2007, the average global wood fibre prices reached their highest levels in 12 years as a result of strong pulp and paper markets and a number of events that impacted the wood fibre supply, including but not limited to increased competition for raw material from the energy sector, weak US sawnwood markets and unfavourable weather conditions.
- The total harvest in the UNECE region in 2006 was estimated at 1.4 billion m^3, which was down 1.4% from the exceptional level of 2005, but 10.0% higher than five years ago.
- Almost 1.2 billion m^3 of total removals were utilized for industrial purposes; 75% consisted of softwood species, a large share of which was used by an expanding sawmilling sector.
- The apparent sharp decrease of 9% in consumption of softwood roundwood is misleading, as large volumes of damaged timber from the 2005 storm in northern Europe were inventoried and actually consumed during 2006.
- Roundwood consumption by the pulp industry in Europe increased by 8% from 2005, reaching a total of 120 million m^3 in 2006, which was 76% of their total wood fibre consumption.
- The Russian Federation has increased harvests of industrial roundwood by 22% over the past five years, reaching 144 million m^3 in 2006, of which 65% was used domestically and the remainder exported mainly to China, Japan and the Nordic countries.
- Roundwood consumption fell in Canada, as the forest industry was negatively impacted by the slump in US housing during 2006 and 2007, and the strengthening of the Canadian dollar.
- Removals of fuelwood have gone up substantially in the past few years, reaching 27% of total removals in 2006, due to higher wood energy consumption driven by government policies, higher costs of fossil fuels and greater supply of storm-damaged timber.
- Mobilization of more roundwood while both wood energy and wood industry demands mount, especially in Europe, is of greater concern in light of new Russian export taxes.

[4] By Mr. Håkan Ekström, Wood Resources International.

Chapter 5
Europe and Russia soar as North America retreats: Sawn softwood markets, 2006-2007[5]

Highlights

- In Europe, strong growth in both production and consumption of sawn softwood occurred in 2006 and continued through mid-2007; however, in the same period North American markets fell.
- German sawmillers continued to significantly increase their production for the third consecutive year, and with more large mills coming in Europe, there is concern over sawlog availability.
- Japan, North Africa and Middle East markets gained importance over the previously attractive United States market for European exporters.
- European sawn softwood prices increased significantly from strong demand – a development that continued into early 2007.
- The production and exports of sawn softwood in the Russian Federation increased again in 2006 – both trends are expected to continue in 2007.
- US housing starts plunged in 2006 by 13% and are forecast to drop below 1.5 million units in 2007, an 18% reduction compared with 2006, causing US sawn softwood demand and production to plummet and prices to dive below break-even levels.
- North American exports to Europe escalated as a weak US dollar and soaring prices in the UK and Germany attracted exporters, a reversal of trends with respect to recent years.
- European exporters to the US in 2006 abandoned the market due to collapsing prices – exports to the US declined by one third in 2006 compared with 2005 and by two thirds in the first quarter of 2007 compared with the same period in 2006.
- Sawlog supply volatility occurred throughout the UNECE region: decreases in Russia and the Baltic States due to a mild winter; increases in western Europe due to the January 2007 windstorms; increases in British Columbia, Canada, due to the mountain pine beetle; and decreases in Quebec, Canada, due to harvesting cutbacks.

[5] By Dr. Nikolai Burdin, OAO NIPIEIlesprom, Mr. Jarno Seppälä, Pöyry Forest Industry Consulting, and Mr. Russell E. Taylor, International WOOD MARKETS Group Inc.

Chapter 6
Russia makes a bid to boost production, while China turns up the pressure: Sawn hardwood markets, 2006-2007[6]

Highlights

- In a reversal from the previous year, in 2006 sawn hardwood production across the entire UNECE region grew by 0.2% to 49.1 million m^3 due to increased production in Europe.
- Consumption of sawn hardwood in the UNECE region decreased by 2.7% in 2006, principally due to the continuing eastward shift in secondary processing.
- Overall European production increased in 2006 and was partly accounted for by a recovery in production levels in Romania, but also due to the growth in hardwood flooring production and interest in European species in export markets.
- Oak continued to dominate hardwood market consumption, with increasing demand across Europe and Asia.
- Production of sawn hardwood in North America decreased by 1.5% in 2006 due to lower domestic demand and the resultant continuing recession in the sawmilling industry.
- China's shift from consumer to competitor is likely to influence all aspects of the global trade in sawn hardwoods through 2007 and beyond, which will increase the pressure on roundwood supplies and raise sawn hardwood prices across the region.
- Exports of sawn hardwood from the United States recovered in 2006, rising by 3.8%, especially to Asia, as the relative importance of export markets increased considerably to 11.4% of all US sawn hardwood produced.
- In a move to boost domestic sawnwood production, Russia introduced a higher export tax on logs and plans further major increases over the next two years.
- The availability of certified European hardwood logs has started to increase and hardwood trading companies are offering more certified wood products to their customers.
- The US may soon adopt a regulatory approach to tackle the international trade in illegal wood and is about to undertake a risk assessment of its own hardwood resources.

[6] By Mr. Roderick Wiles, Broadleaf Consulting.

Chapter 7

Panel industry squeezed by energy costs, fibre supply and globalization: Wood-based panels markets, 2006-2007[7]

Highlights

- Panel markets strengthened in Europe due to enhanced construction activity and revival of the furniture sector, and Russian panel markets continued strong growth, but North American markets stagnated in 2006.
- Panel manufacturers faced increased costs for wood, resins and energy, although buffered by higher prices in Europe; however, in North America profitability shrank, with lower prices.
- In the light of new EU renewable energy targets, competition for wood raw material with the biomass industry remains tight in Europe despite the mild 2006/2007 winter.
- European producers dependent on imported wood are concerned about rising Russian roundwood export taxes.
- Plywood producers in the United States and Europe continue to be confronted with rising imports, especially from China; however, imports from Brazil fell.
- Regulatory constraints on formaldehyde emissions have been increased in California and will significantly impact the US MDF and particle board industry.
- Maximum achievable control technology regulations to control emissions in the wood-based panel industry will be enforced beginning in October 2007 in the US, which will add additional business costs.
- Because of the decline in furniture manufacturing demand, North American MDF and particle board manufacturers rely on residential construction-related demand for cabinets and mouldings.
- Weak US housing starts and large North American capacity increases in OSB have drastically reduced prices of OSB.
- CIS panel production continued escalating, by 7.8% in 2006, with the additional volume consumed domestically, as consumption jumped by 14.8%.

[7] By Dr. Ivan Eastin, University of Washington, Ms. Bénédicte Hendrickx, the European Panel Federation, and Dr. Nikolai Burdin, OAO NIPIEIlesprom.

Chapter 8

Paper and pulp output continues to climb in Europe and Russia, but falls in North America: Markets for paper, paperboard and woodpulp, 2006-2007[8]

Highlights

- Overall in the UNECE region in 2006, paper and paperboard consumption, production and trade continued growing, with gains in Europe and the CIS, but a downturn in North America.
- North American pulp and paper production and consumption decreased slightly in 2006 and early 2007, in part due to the slowdown in United States housing construction and its subsequent economic impacts.
- Russia's exports of paper, paperboard and woodpulp fell slightly in 2006, while domestic consumption accelerated by 11%.
- North American prices of many major pulp, paper and paperboard commodities were approaching ten-year highs by early 2007 due to a weaker US dollar and declining capacity; prices also rose in Europe.
- Projects to produce cellulosic fuel ethanol from biomass are underway in North America, and although wood energy use is low, paper companies are supporting efforts to develop integrated biorefineries to complement existing pulping facilities and produce bioenergy and biofuels.
- Fuel prices rocketed, raising concerns about energy security and climate change, which resulted in widespread discussions on renewable energy sources, with the pulp and paper industry on centre stage, since it is the foremost industrial producer and user of renewable energy in Europe.
- Initiatives such as the Forest-based Sector Technology Platform play a key role in helping the European pulp and paper industry develop sustainable, effective bio-solutions to alleviate climate change and find solutions to greater wood mobilization.
- The new EU chemicals directive, REACH, with the objective of safe use of man-made products from the chemical industry, was essential in ensuring that both pulp and recovered paper were treated in a manner that did not constrain the paper industry's competitive wood procurement.

[8] By Prof. Eduard Akim, PhD, the St. Petersburg State Technological University of Plant Polymers and the All-Russian Research Institute of Pulp and Paper Industry, Dr. Peter J. Ince, USDA Forest Service, Mr. Bernard Lombard, Confederation of European Paper Industries, and Mr. Tomás Parik, Wood and Paper, A.S.

Chapter 9

Energy policies reshaping forest sector: Wood energy development in the UNECE region, 2006-2007[9]

Highlights

- Climate change awareness has increased political and public interest in wood energy, and government and market policies are reshaping the entire forest sector in the UNECE region.
- In 2007, the EU launched an ambitious energy policy, with a target of 20% renewable energy by 2020, in which wood, currently the largest component of bioenergy, will play a major part.
- The sustainability of bioenergy is increasingly being put under scrutiny especially in the wake of the controversies surrounding non-sustainable production of palm oil for energy purposes.
- Wood pellet markets are growing rapidly in Europe, pushed by escalating fossil fuel prices and government policies, resulting in shortages and increasing prices.
- With the large increase in western European demand for wood pellets, Russia could become a major supplier of wood energy to Europe.
- Russia has tremendous potentials for increased use of wood energy, but up until now, low cost fossil fuels and low harvests have been obstacles to their development of wood energy.
- In Canada, high fossil fuel prices have led to wood energy development picking up pace, both in the form of increased self-generation in forest industry as well as rapid increase in wood pellet production, of which 90% is aimed at export markets.
- In the Canadian province of British Columbia, large amounts of beetle-damaged wood are to become raw material for wood pellet production.
- The United States has set a number of goals aiming to reduce its dependence on imported fossil fuels, among these are targets to reduce gasoline use by 20% by 2017 and to make cellulosic ethanol cost competitive with corn ethanol by 2012.
- US forest products companies are supporting efforts to develop integrated forest biorefineries that would complement existing pulping plants and produce bioenergy and biofuels.
- Wood-based electric power production has received support in some of the 24 US states with Renewable Portfolio Standards (RPS), where wood power is seen as competitive with other renewable power technologies in meeting RPS requirements.
- Concern has been expressed about emissions of pollutants, notably particles and persistent organics, from wood-burning installations, especially households.

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[9] By Dr. Bengt Hillring, Swedish University of Agricultural Sciences (SLU), Mr. Olle Olsson, SLU, Dr. Christopher Gaston, FPInnovations-Forintek Division, Dr. Warren Mabee, University of British Columbia, Dr. Kenneth Skog, USDA Forest Service, Dr. Tatiana Stern, SLU.

Chapter 10
Biomass for energy and plantations – new certification driver: Certified forest products markets, 2006-2007[10]

Highlights

- The area of certified forest grew by 8.3% from 2006 to 2007, reaching 292 million hectares, which is 7.6% of the global forest area; however, the rate of increase is slowing.
- More than 84% of the world's certified forest is located in the northern hemisphere, with more than half (56%) in North America and another 28% in Europe; however, their shares are decreasing with an expected boom in Russia and China.
- The global push to reduce carbon emissions and to produce more forest-based biofuels means woodfuels have to be considered in terms of their sustainable production, which could mean their certification.
- The introduction of new certified species from plantations, such as hybrid poplar, into the solid wood and biomass market sectors is expected to rapidly increase both the volume of certified supply and market demand.
- Half of the world's certified forest area is in plantations, mixed plantations and semi-natural forests, all of which are necessary for forest products.
- Forest certification helps to accelerate access to international voluntary carbon markets, where regional climate registries acknowledge qualified certification systems as a baseline for forest-based offset verification.
- Certification of the same forests and products by multiple schemes is a trend originating from the desire of industry and consumers for mutual recognition by the major certification schemes.
- Paper purchasers are driving increased demand for certified wood, with impacts felt across major geographic regions and pulp and paper distribution channels.
- Due to low consumer awareness, and therefore demand, as well as the lack of incentive for the producer, the majority of certified forest products are marketed without any reference to certification.
- Non-wood forest-products are being certified for sustainable production, including cork, essential oils, chestnuts, honey, berries, truffles and mushrooms.

[10] By Mr. Florian Kraxner, International Institute for Applied Systems Analysis, Dr. Catherine Mater, Mater Engineering, and Dr. Toshiaki Owari, University of Tokyo.

Chapter 11
Increasing global demand benefits value-added trade, but downturn in US housing hurts engineered products: Value-added wood products markets, 2006-2007

Highlights

- World furniture consumption and trade is continuously expanding, including in some developing countries, which are becoming consumers of high quality furniture.
- Europe's tightening supply, and consequent rising prices of roundwood, is one factor driving imports of value-added wood products from cost efficient suppliers, e.g. from Asia, where decreased roundwood availability has raised prices too.
- Innovative furniture manufacturers in the UNECE region are finding ways to keep manufacturing cost competitive, e.g. by paying attention to delivery times and resource utilization.
- Anti-dumping measures have proved ineffective to reduce rising furniture imports into European markets and a new wave of barriers to trade is expected by market participants.
- Creation of a World Furniture Federation is expected in 2007 to alleviate trade problems by improving cooperation between industries in different parts of the world.
- China has become the world's largest furniture exporter, overtaking Italy in export value, and Malaysia is the world's largest tropical furniture exporter.
- In the United States, builders' joinery and carpentry (BJC) and profiled wood markets have seen the wave of southern-hemisphere, plantation-based softwoods arrive; however, Europe is still dominated by local softwoods.
- Slowing US housing construction may not be catastrophic for profiled wood and BJC markets; owners will stay longer in their houses and invest more in renovation and maintenance.
- After an extended period of growth, weakness in US housing construction resulted in a drop in production for all engineered wood product (EWPs) in 2006, particularly I-beams and laminated veneer lumber (LVL), as 75% of these products are consumed in new residential construction.
- Forecasts call for continued weakness in North American EWPs markets through 2007, in tandem with the residential market, with a turnaround expected sometime in 2008.
- New generation EWPs such as oriented strand lumber (OSL) will compete with LVL and glulam in various end uses including structural beams and headers over windows and doors and offer builders even more EWP choices.

Chapter 12
Lower tropical exports boost prices: Trends in tropical timber production and trade, 2005-2007[11]

Highlights

- For International Tropical Timber Organization (ITTO) producer countries as a whole, forest coverage declined from 52.7% of total land area in 1985 to 46.4% in 2005 primarily as a result of agricultural expansion.
- Softwood exports from tropical countries to advanced economies remain marginal, although pine plantations have grown strongly and steadily and will play a key role in the future as many countries (especially in Asia) restrict production from natural forests.
- Public procurement policies have entered into effect in many EU countries such as France, the largest EU log and veneer importer, where from 2007 50% of public procurement of timber is to come from certified tropical forests, rising to 100% by 2010.
- Malaysia is still by far the largest exporter of all tropical primary timber products, dominating the export of logs (41.2% market share 2007 forecast) and veneer (33% market share 2007 forecast).
- Chinese exports of tropical plywood have grown strongly over the last three years (from 0.7 million m^3 in 2004 to a forecasted 1.3 million m^3 in 2007) due to its booming plywood industry.
- China is by far the largest importer of tropical logs and sawnwood, although Chinese tropical log imports have decreased slightly over the last three years (from 7.3 million m^3 in 2004-2005 to a forecasted 6.5 million m^3 in 2007) as supplies tighten and Russian softwood log imports continue to increase.
- Decreasing exports from many tropical countries, together with a global economic expansion and improved consumer confidence in many markets, led prices for a majority of primary tropical timber products to strengthen in 2006.
- Brazilian suppliers of softwood plywood, still exporting half of their production to the United States despite an 8% import tax and an unfavourable exchange rate, are increasing exports to the EU and favouring domestic markets boosted by a flourishing construction sector.
- Secondary processed wood products exports from tropical countries exceeded $10 billion in 2005 for the first time, 5% more than the value of primary products and are forecast to continue growing because of competitive prices and labour costs, excellent timber quality and supportive policies.
- As only 5% of forests certified for sustainable forest management are in tropical developing countries, these countries are having difficulty accessing markets demanding certified wood products.

[11] By Dr. Steven E. Johnson, Dr. Jairo Castaño, Mr. Jean-Christophe Claudon and Mr. James Cunningham, all from the International Tropical Timber Organization.